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THE IMPACT OF HIV/AIDS ON EDUCATION IN NAMIBIA

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Preface – a user's guide to this report

This report is intended as a resource to several types of users, from those who require broad overviews of the issues, to planners and programme managers who may need more in depth understanding of specific issues and areas. The following outline of the report and suggestions may assist different users to access the information they require in the most efficient way.

A short **Executive Summary** provides an overview summary of findings and key recommendations and is likely to be useful to all readers.

A second, relatively comprehensive **Extended Summary** is an introduction for readers who need to have a somewhat more detailed understanding of the issues and to identify those they wish to explore further, as well as an easy reference for general use.

The **Main Text** of the report is intended for people involved in specific areas of the HIV/AIDS response who can focus on specific sections of most relevance to their activities, as listed in the table of contents.

In each section, key concepts are highlighted in italics at the beginning of bullet points. In addition, key recommendations are included in each of the sub-sections.

Further methodological and other technical detail is provided in **Annexes**.

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Acronyms

AUPE	Adult Upper Primary Education programme
ARV	Anti-retroviral (drugs)
ASDSE	Adult Skills Development for Self-Employment
BEP	Basic Education Project
CBO	Community Based organisation
CLDC	Community Learning and Development Centre
COSDEC	Community Skills and Development Centre
DABE	Directorate of Adult Basic Education
DHS	Demographic and Health Survey
EMIS	Education Management Information Systems
EAP	Employee Assistance Programme
ECD	Early Childhood Development
GIPF	Government Institutions Pension Fund
HBC	Home Based Care
HOD	Head of Department
MBESC	Ministry of Basic Education Sport and Culture
MHETEC	Ministry of Higher Education, Training and Employment Creation
MOHSS	Ministry of Health and Social Services
MFMC	“My Future My Choice” Programme
NACOP	National AIDS Committee
NACP	National AIDS Coordinating Programme
NAMCOL	Namibia College of Education
NASO	Namibian Students Organisation
NIED	National Institute for Educational Development
NLPN	National Literacy Programme
NGO	Non-governmental Organisation
OPM	Office of the Prime Minister
PSEMAS	The Public Service Employees Medical Aid Scheme
PSC	Public Service Commission
RACOC	Regional AIDS Committee
RACE	Regional AIDS Committee in Education
SADC	Southern African Development Community
SEU	Special Education Unit

UNAM	University of Namibia
VCT	Voluntary Counseling and Testing
VET	Vocational Education and Training

Executive summary

Education has been identified as one of the principal means of Namibia's socio-economic development. The MBESC has made remarkable strides since independence towards attaining Education for All, and its goals of access, quality, equity, democracy and efficiency. The focus of the sector after independence has been particularly on improving access and participation, and building capacity throughout the sector. As of August 2001, Namibia's education sector included 1545 schools, as well as tertiary and vocational institutions, and non-formal education for adults and youth. The education sector is also the nation's largest single employer: the MBESC alone employs over 20,000 employees, including 18,117 teachers. Education expenditure is already a high percentage of national income when compared to other countries, and personnel account for around 80% of expenditure. Primary school enrollment rates have reached over 93%, gender parity is generally high compared to many other African countries, and improved access has extended to various marginalised groups. In 2001, the total number of learners were 528,958. The MHETEC has also developed in-country tertiary and vocational education capacity.

The HIV/AIDS epidemic presents a major new challenge to Namibia and key partners of the education system. In 2000, 23% of pregnant women in the HIV Sentinel Sero-survey were HIV infected and levels are still rising. Infection levels vary between areas of the country, but in all of them the levels are high enough to be a huge public health challenge. The AIDS epidemic lags behind the rise in HIV infection rates by 8-10 years. The relatively early stage of Namibia's AIDS epidemic creates important potential for pro-active responses so that the country is well prepared to manage the main burden of the epidemic. Nevertheless, AIDS is already increasing demands on social services such as health and welfare, particularly in regions with more advanced epidemics. Household, family and community capacity to cope are stretched by its impact on incomes, costs, psychological well-being, and family structures.

Namibia's response to the epidemic has benefited from increasingly committed political leadership at the highest and other levels. Political will is internationally recognised as a distinguishing feature of all successful, sustainable efforts to combat the epidemic. Initial focus of responsibility and activities around HIV/AIDS in the health sector is now being replaced by promotion of a multi-sectoral response. Both Ministries of Education developed a groundbreaking strategic and operational plan on HIV/AIDS in 2001 and its implementation has been initiated.

The HIV/AIDS impact study was undertaken to provide more information to MBESC and MHETEC about ways in which HIV and AIDS undermine their mandates to provide high quality, relevant education. The study involved a survey of schools; visits to schools and other institutions to discuss issues with learners, teachers and other key role players; review of other data; and use of projections to clarify how the epidemic and its impacts will affect education in future. Projections have limited accuracy, but should give an indication of trends and relative importance of issues to be considered by planners.

How will HIV/AIDS affect demands and needs faced by the education system?

Findings

- The total number of children and youth requiring education will continue to grow over the next decade but this growth will be slow down as a result of the epidemic.
- The total number of people aged 5-19 is projected to be around 8% lower than it would have been without the epidemic.

- New infection among people aged 15-25 is the main factor driving the HIV/AIDS epidemic.
- Estimated HIV prevalence is close to zero among Namibians in the early teens, and then rises rapidly from the mid-teens to around one-in-five people by the mid-20s.
- Importantly, the proportion of teenagers who are *not* infected is likely to be higher than assumed by many young people. This is an *important message of hope*.
- Despite important progress in prevention, levels of knowledge and behaviour change are limited.
- A relatively small proportion of learners in education institutions is likely to be ill with HIV/AIDS.
- Children affected by the pandemic constitute a significant proportion of the school age population.
- By 2010, as many as 130,000 children in total, and around one-in-four children aged 10-14, may have lost at least their mothers to AIDS.
- There are strong indications that many orphans are at risk of dropping out of school, erratic attendance, poorer concentration and performance, and emotional and behavioural disturbances. Older female and younger male learners may be particularly vulnerable, though no clear influence of HIV/AIDS is apparent so far.
- Learners affected by HIV/AIDS face other challenges that create obstacles to education including lack of sufficient food and money for school fees, uniforms and books. They also are face psychosocial stresses due to illness or loss of loved ones.
- Children of poverty and trauma are more likely to be at risk of HIV infection, abuse and exploitation.
- Orphans' vulnerability cannot, for practical purposes, be separated from that of other children in poverty independent of HIV/AIDS. Responses to support orphans are therefore relevant to many other children and youth, and their ability to access and succeed in education.

Recommendations for Containing the Spread of HIV/AIDS

More than any other sector, education has opportunities to influence levels of HIV infection among young people, through its contact with them in institutions and non-formal education.

- *Mainstream HIV/AIDS prevention into education*, with more effective integration of lifeskills into school routines and assessments.
- *Strengthen the content of curriculum* to provide greater knowledge and skills to change behaviour.
- *Strengthen life skills teaching capacity* and ability to deliver more effective HIV/AIDS education.
- *Prioritise life skills programmes targeted at educators themselves* to reinforce learner prevention.
- *Enhance programmes in primary schools and Early Childhood Development*.
- *Address cultural, parental, and educator sensitivities* that obstruct effective prevention programmes.
- *Ensure safe and supportive institutional environments by enforcing zero tolerance* for sexual harassment by educators or learners, and ensure safety of schools, hostels and community boarding.
- *Engage more effectively with parents and communities*. Community and family environments or norms often undermine the HIV/AIDS messages promoted in schools.
- *Monitor the implementation and effectiveness of prevention programmes more effectively*.
- *Strengthen coordination and inputs of other sectors and programmes*. Other sectors and programmes will be critical components of effective education responses for the foreseeable future.

Recommendations for providing social support to learners

Education is uniquely placed to play a key role in supporting vulnerable learners and protecting their development. The sector has daily contact with them, and has larger professional capacity and a presence in more communities than any other sector.

- *Clarify overall policy on the roles and obligations of educators, education institutions and other sectors* in relation to orphans and vulnerable children
- *Create better mechanisms to finance direct costs of vulnerable children's education* including fees, uniforms and materials.

- *Extend school nutrition programmes for vulnerable learners.* School feeding schemes have proved effective in boosting enrollment and need for feeding is widespread, independent of HIV/AIDS.
- *Develop systems to identify vulnerable learners early.* Schools should administer a social register system to all learners at least twice yearly to identify vulnerable children.
- *Develop 'Circles of Support' for affected learners and educators.* These are networks to use available capacity and skills of educators and other resources more efficiently. A key objective is to support and coordinate with, but not undermine, community and other initiatives.
- *Actively support initiatives to strengthen capacity and efficiency of Social Services.*
- *Involve learners themselves in decision-making and action wherever possible.*
- *Mobilise more resources for education sector initiatives.* The MBESC should advocate for more funding to support an expanded role in support of orphans and vulnerable children.

How does HIV/AIDS affect ability to deliver education?

Key findings

- A significant proportion of education managers and staff still has inadequate basic knowledge and awareness around HIV/AIDS or are in denial.
- Namibia's teachers are at a relatively high risk of HIV infection. Projections suggest that around one-in-seven educators are HIV infected in 2002. Levels reach one-in-four in Katima Mulilo, the region with the most advanced epidemic
- Evidence suggests increasing occurrence of illness and deaths among younger staff. Teacher losses averaged 1.5% over the last two years with a higher rate (2%) in the North.
- The cumulative loss of educators to AIDS between 2002 and 2010 could be 860 if effective antiretroviral drug (ARV) treatment is widely accessible, or up to 3 360 if it is not. This is equivalent to between 5% or 19% of the current workforce.
- ARV treatment can substantially lower death rates and cumulative loss of teachers.
- Under ARVs scenarios, the number of educators on chronic medication will accumulate rapidly.
- Schools reported absenteeism, due to illness or funeral attendance, as being a major and increasing problem for education quality particularly in the north.
- Deaths and illness among managers were not frequently reported. However, impacts of vacant management posts were reported to be particularly disruptive as they have "multiplier effects".
- HIV/AIDS creates greater complications for the inadequate relief teacher system. Most schools have difficulty funding relief teachers, as their Boards cannot afford to pay for them.
- Medical aid costs are likely to be the single largest HIV/AIDS related cost. However, ARVs are a potentially affordable strategy for the education system.

Recommendations

- *Develop a clear workplace HIV/AIDS Policy and Programme.* These should provide an integrated framework for HIV/AIDS prevention, care and support, and managing impacts on education provision.
- *Rapidly roll out an effective HIV prevention/life skills programme for educators and trainees.*
- *Establish a Wellness or Employee Assistance Programme (EAP)* to provide a coordinated mechanism to assist infected and affected staff to deal with the range of stresses created by HIV/AIDS.
- *Strengthen medical aid cover and access to ARVs.* The education sector should actively engage current processes that are reviewing PSEMAS.
- *Review pension benefits and administration.* HIV/AIDS fundamentally changes the profile of needs to be met by the GIPF. Pension benefits and processes are also important to manage effects of illness on delivery of education.

- *Review pre- and in-service training.* These have a critical role to reinforce prevention and impact management strategy, including ensuring output of sufficient number of educators.
- *Strengthen management of absenteeism and ill health by reviewing policies, procedures and capacity.*
- *Identify vulnerable workplaces and work processes for targeted interventions.*
- *Work with other sectors to define overall strategy and implement specific responses* to needs of infected and affected staff, and to protect service function.

Conclusions and Strategic Recommendations

The HIV/AIDS epidemic has profoundly changed the internal and external environment of the education sector. Most importantly, at current infection rates, over one quarter of the nation's investment in education could be lost through premature AIDS illness and deaths among learners. In any single year, HIV/AIDS alone seems unlikely to destabilize the whole system. However, this hides gradually increasing effects on quality and access, as well as severe impacts on many schools and many thousands of infected and affected employees and learners. Impacts are likely to disproportionately affect communities and individuals that are already disadvantaged, obstructing attempts to improve equity.

HIV/AIDS has to be recognised as “core business” for the whole education sector for the foreseeable future. Evaluation of all components of the sector indicates that they are all affected and have roles to play in protecting education from HIV/AIDS impacts. “Mainstreaming” of HIV/AIDS within all components of the education sector and at all levels is imperative to address HIV/AIDS effectively. Importantly, *HIV/AIDS presents opportunities not just threats*. Many aspects of HIV/AIDS responses are consistent with existing priorities, programmes and initiatives to strengthen education access and quality, independent of HIV/AIDS. HIV/AIDS can reinforce the urgency of need for them and creates opportunities to mobilise support to remove obstacles to efficient implementation.

Recommendations

A more effective education sector response to the epidemic needs to consider the following key components of strategy.

- *Ensure strong leadership.* Sustained, high profile political, managerial and professional leadership in all components and levels of the education system is a basic requirement for effective responses.
- *Actively combat stigmatization, secrecy and denial around HIV/AIDS.*
- *Define roles and accountabilities of various education components and players, and develop guidelines* on various aspects of action.
- *Disseminate knowledge across the sector and include positive messages.*
- *Ensure decentralised approaches.* Avoid a “top down” approach to developing and implementing responses. The key to success is facilitating action at cluster, institution and community level.
- *Ensure flexibility to deal with uncertainty.* Scenario planning approaches and flexible strategies are needed in areas where important uncertainties exist, for example, around levels of impact on teacher and learner numbers.
- *Inter- and intra-sectoral co-ordination and partnerships.* Many aspects of the response to impacts on educators and learners require cooperation across education components and with other government sectors, NGOs and CBOs.
- *Refine or develop HIV/AIDS strategic and operational plans at all levels of the sector.*
- *Improve information and monitoring of impacts and responses.*
- *Strengthen HIV/AIDS program capacity and structures.* This is a priority for effective responses.
- *Develop strategy on resource mobilisation and allocation* to support the expanded, critical role to be played by the education sector.

Extended Summary - Impacts of HIV/AIDS on Education in Namibia

Introduction - the Namibia education sector

Education has been identified as one of the principal means of Namibia's socio-economic development. The nation's commitment to education is clearly laid out in Namibia's Constitution, which makes education a right of all Namibians, and makes primary education compulsory. Namibia has also ratified the UN Convention on the Rights of a Child, and the African Charter on Human and People's Rights, which create obligations to ensure education and other support for children. In 2001, Namibia's education sector comprised of 1026 primary schools, 378 combined schools and 129 secondary schools. Government is the nation's largest single employer, and the Ministry of Basic Education Sports and Culture (MBESC) employs the largest number of people with over 20,000 employees, including over 18,000 teachers. In addition to contributions by the public sector, substantial inputs are made by a variety of other players including households, communities, development agencies, NGOs, local authorities, churches, other responsible authorities.

The MBESC has made remarkable strides since independence towards Education for All, and its goals of access, quality, equity, democracy and efficiency. The focus of the sector after independence has been particularly on improving access and participation, and building capacity throughout the sector. Primary school enrollment rates have reached 93% and in addition to general extension of access, the sector has reached out to educationally marginalised groups including the San and Ovahimba. Other achievements include an increase in the number of primary and secondary schools particularly in economically disadvantaged areas in the country. In the later 90's Namibia witnessed an increase in primary and secondary schools at an average of 1.6% per annum. The education sector has also witnessed an increase in the number of trained teachers and individuals in management positions. Generally there is gender parity in enrollment levels with the exception of some regions i.e. Katima and Rundu, where secondary enrollment by girls is lower. The opposite is true in Ondangwa East and West where enrollment of boys is lower. At the same time, the Ministry of Higher Education, Training and Employment Creation (MHETEC) has developed in-country capacity for tertiary and vocational education.

A number of challenges face further progress in primary, secondary and higher education. These include the ongoing need to reduce inherited inequities in access to education, particularly in secondary schooling, as well as the necessity to increase quality of education and its alignment with the economy's skills requirements. These needs have to be addressed in the context of limited managerial capacity, a relatively inexperienced and under-qualified teaching force, logistical difficulties due to large distances and sparsely populated areas, infrastructure backlogs, and challenges of sustaining employee motivation and morale. Obstacles tend to be greatest in the north and other areas of inherited disadvantage, where the majority of the population lives but the system is often already stretched simply to maintain basic aspects of education delivery for many communities. Another challenge is financial resource constraints. Education expenditure as a percentage of national income is already high when compared to other countries. Personnel account for around 80% of expenditure, limiting amounts available for other needs.

Progress towards effective education for all is challenged by the prevailing social and economic conditions. Although Namibia is classified as a middle-income country, its Gini coefficient is the highest in the world, reflecting high levels of poverty and income inequality. Community and households resources available to support education therefore vary widely. Society is also in a state of

transition, with disruption of many traditional social systems and high rates of migration. Overall capacity to address any new challenges is limited by the small and relatively scattered population.

Namibia's HIV/AIDS epidemic and current responses

The HIV/AIDS epidemic presents a major new challenge to Namibia. In 2000, the HIV Sentinel Sero Survey reported HIV infection levels of 22.3% for pregnant women nationwide. HIV infection levels vary widely between regions from around one in three women in Katima Mulilo and Windhoek, to 10% or less in sites such as Gobabis, Rehoboth and Opuwo. More remote and less densely populated areas seem to have lower levels of infection. To some extent, this may represent later development of the epidemic in some areas and communities, but trends suggest that risk factors and thus the shape of the epidemic curves vary between regions. Importantly, in all sites infection levels are high enough to be a huge public health challenge. In addition, the national epidemic is still growing. In only a few sites are there signs that the epidemic may have reached a plateau, emphasising the important opportunities for prevention.

The AIDS epidemic lags behind the rise in HIV infection rates by 8-10 years. The relatively early stage of Namibia's AIDS epidemic creates important potential for pro-active responses so that the country is well prepared to manage the main burden of the epidemic when it arrives. Nevertheless, areas with more mature epidemics have already experienced a marked rise in the number of AIDS cases. Nationwide, AIDS deaths in the 15-49 year age group continue to increase and now account for around half of all deaths in hospitals.

HIV/AIDS is already massively increasing demands on social services such as health and welfare. At household, family and community level it is stretching coping capacity through its impact on income and costs, psychological effects of illness and deaths, and disruption of family structures. HIV/AIDS has cost implications for businesses and can seriously disrupt subsistence agriculture. The epidemic therefore is a major challenge to the resource requirements and capacity of key partners of the education system.

Namibia's response to the epidemic has benefited increasingly from commitment of political leadership at the highest and other levels. Political will is internationally recognised as a distinguishing feature of all successful and sustainable efforts to combat the epidemic. The national response to HIV/AIDS is being led by the National AIDS Committee and National AIDS Coordinating Programme (NACOP) situated in Ministry of Health and Social Services (MOHSS). A further important development is that initial concentration of responsibility and activities around HIV/AIDS in the health sector is now being replaced by promotion of a more multi-sectoral response. Various Sub-Committees of NACOP exist to cater for the specific needs of regions (RACOCs) and sectors (e.g. RACE's in education regions). Civil society groups and development partners play key roles in the national HIV/AIDS response at all levels.

There is increasing recognition of, and response to, the critical role of the education sector in prevention, support of infected and affected people, and in maintaining service delivery despite AIDS impacts. The sector's roles have begun to expand from its earlier role as a partner of NGOs and the MOHSS in HIV prevention activities. Both Ministries of Education developed a groundbreaking strategic and operational plan on HIV/AIDS in 2001 and its implementation has been initiated. The strategy lays out processes to refine and implement strategy in particular areas that are consistent with, but extend beyond, objectives laid out for the sector in the National Strategic Plan on HIV/AIDS for 1999-2004. Prevention is the main focus of the plan, but it also covers various aspects of care, support, and mitigation of impacts on both employees and learners.

Terms of reference and methodology

The MBESC and MHETEC have recognised that the HIV/AIDS epidemic will have important effects on the education sector, its environment and its ability to meet objectives of equity, effectiveness and efficiency. The terms of reference of this study defined its objective as helping the Education sector to assess the impact of HIV/AIDS on its ability to meet its mandate. Specific issues to be examined include effects on:

- 1) Demand for education and any changes in the scale or type of needs to be met by the sector;
- 2) Ability to supply education, through impacts on employees and trainees;
- 3) Costs of education;
- 4) The process and quality of education;
- 5) The content and role of education
- 6) Planning and management in the education sector.

The study was also tasked with a review of current responses and asked to make recommendations to assist in refining strategy to address impacts.

The study employed the following methodology:

- *Qualitative data collection* through group discussions and key informant interviews with managers, educators and learners in seven education regions, as well as with other stakeholders in the Ministries, and other sectors.
- *A school survey* of a nationally representative sample of 103 primary, 51 combined and 24 secondary schools. This collected data from school heads, guidance teachers and 734 Grade 10 learners.
- *Secondary data collection*, including EMIS data, policies, legislation, and other documentation.
- *Demographic projections* to assess current and future levels of HIV/AIDS impacts. These were produced with the Metropolitan Life/Doyle model, calibrated to the profile of the Namibian epidemic.

Survey and region visit findings are expected to be quite indicative of current levels of HIV/AIDS impacts, responses and capacity. Data from all sources were integrated to inform interpretation.

Projections produced in this study can be expected to give a reasonable representation of the scale and types of HIV/AIDS impacts that need to be considered in education planning. However, projections involve many assumptions. Accuracy is limited by many factors, including limitations of the available data on the structure and trends in the underlying population, and the HIV/AIDS epidemic in Namibia.

Planning which uses the projections must therefore accommodate a number of possible scenarios, to limit the risk that any particular projection is not accurate. In this report point estimates of levels of impact are often presented. Planners should be aware that actual levels are likely to fall within a range around these estimates and at local level variation is likely to be large. Further details of the range of possible levels of impact are provided in the main section of the report.

How will HIV/AIDS affect needs and demand for education?

International and Namibian experience has shown that the HIV/AIDS epidemic has substantial influences on the needs of learners and demand for education. Importantly, it also shows the potential for interventions to mitigate negative impacts.

Numbers of children requiring education

The HIV/AIDS epidemic is expected to slow growth in the number of children in Namibia for several reasons. These include death of women in childbearing ages, lowered fertility among HIV-infected women and death, usually before the age of five, of children who are infected with HIV around the time of birth or through breastfeeding.

Projections of HIV/AIDS impacts on the number of young Namibians indicate several important issues for planning:

- *Slower growth in the size of school-going age groups.* In the absence of the epidemic, the 5-19 age group would have grown from around 593,000 in 1995 to around 815,000 by 2010. HIV/AIDS is projected to lead to a population aged 0-19 of only around 752,000 by 2010.
- *Earlier impacts on the size of the population in younger age groups.* Projections suggest that HIV/AIDS is already likely to have resulted in a leveling in the absolute numbers of children in the 0-4 year old age band. The 5-9 year age group, which includes most children entering school, is likely to start declining around now, and will be around 14% smaller than expected in the absence of AIDS by 2010. A plateau in the numbers of children aged 10-14 and 15-19 year ages groups is expected to occur around 2009 and around 2015 respectively, followed by declines.
- *Robustness of projections to changes in many key assumptions.* The general trends that are projected seem relatively insensitive to changing key assumptions such as fertility of HIV infected women and rates of transmission of HIV from mother to child.

Enrollment data for the Katima Mulilo region, indicates that primary school enrollment has been declining over the late 1990's. Projections and EMIS data suggest that HIV/AIDS may explain some, but not all of this. An actual decline in 5-9 year old learner numbers is expected to only occur from 2001. Declining enrollment has also occurred in older age groups that would not yet be affected by declining fertility due to AIDS. Other factors (e.g. migration; general socio-economic conditions) are thus likely to be dominant factors, but HIV/AIDS impacts on children's households may also be a contributing factor.

The projected impacts of HIV/AIDS on learner numbers have important implications for planners. Education sector infrastructure and human resource planning has to anticipate changes in the expected number and age profile of learners. Analysis of the 2001 Census and close monitoring will be required to assess the accuracy of the projections. Importantly, changes in learner numbers, particularly at local level, will be difficult to predict and planning will inherently have to aim for flexibility to deal with uncertainty.

How does HIV/AIDS affect needs of learners and their education outcomes?

Needs for HIV prevention

Detailed evaluation of current prevention programmes was beyond the scope of this project. However, knowledge, attitudes and systems created by HIV prevention programmes are a key foundation for successful impact management. HIV prevention is also of central importance to avoid losing a large proportion of the education sector's investment in young people. Examination of dynamics of the epidemic, interactions at school and region level, and the school survey provided important information to inform the Ministries' overall HIV/AIDS response.

The Challenge

New infections among people aged 15-25 are the main driving factor in perpetuating the HIV/AIDS epidemic. Estimated HIV prevalence is close to zero among Namibians in the early teens, and then rises rapidly from the mid-teens to over 20% in individuals aged 20. Higher levels of infection are experienced in many communities. In young men the rise in infection occurs later, as reflected in the older average age of men reported to have HIV/AIDS. However, levels among men probably rise to a peak similar, though lower, to those among women by the time men are in their 30s. For all males and females combined, young people rates are estimated to be below one in 5% in the 15-19 age group before leaping to around one in four in the early 20s. Importantly, the proportion of teenagers who are *not* infected is likely to be higher than assumed by many young people. This is an important message of hope.

Antenatal survey data indicates that rates of new HIV infection rates among young people in Namibia remain high. Among women aged 15-19 and 20-24, infection levels have stopped growing since 1996 but are too high (12% and 20% respectively) to produce anything near an HIV/AIDS-free generation. The 2000 DHS also shows that HIV/AIDS knowledge remains inadequate despite high levels of awareness of HIV/AIDS. Less than a third of 15-19 year olds knew all three main ways to prevent HIV infection.

Current levels of HIV infection fundamentally challenge the mission of the education sector. Unless prevention is more effective, over one quarter of learners will become infected during or soon after their education. Most of these will die of AIDS before they reach the age of 40. This is not only a social and human disaster, but is a loss of investment in education that far exceeds most other system inefficiencies. More than any other sector, education has opportunities to influence levels of HIV infection among young people, through its direct contact with them in institutions and non-formal education.

Current Responses

In response to the need for prevention, the MBESC has infused HIV/AIDS education into the science curriculum. HIV/AIDS education has been included in life skills training by Guidance and Counselling teachers. However, "life skills" training as applied in Namibian schools seems not to have fully adapted its content and focus to ensure that it provides young people with the skills required to empower them to protect themselves against HIV/AIDS and cope with its consequences. Additionally, it has worked with UNICEF in the internationally recognised extracurricular "My Future My Choice" (MFMC) programme. This targets 15 to 18 years olds in and out of school, but younger learners have also participated. These actions have been complemented by initiatives of other development partners, NGOs, communities and pre-service programmes in teacher training colleges.

Coverage of HIV/AIDS prevention programmes in Namibia is quite extensive. However, it is clear that many schools have not been reached in any substantial way. In the school survey, 69% of Grade 10 learners incorrectly answered at least one of three questions on basic facts about HIV/AIDS. Alarming, more learners in the North had inadequate basic knowledge (74%) compared with learners in the South and Central areas (54%). Even in participating schools, key programmes like MFMC are voluntary and extracurricular, so they do not reach all learners. Many schools do not sustain programmes after initial activities. Large numbers of learners seem to know very little about the programme except that it distributes condoms. Particularly in rural areas, programmes are hampered by lack of equipped Guidance and Counselling or Science teachers, and of systems to support peer and other HIV education.

Even in schools with stronger programmes, there is skepticism among staff and learners about whether risk behaviour of young people is actually changing. Various reasons were cited for this including insufficient knowledge and skills to deal with the complex technical and psychosocial issues around sex, lack of availability of condoms and peer pressure.¹ Many broader factors which create HIV infection risk were noted that are not yet adequately addressed by school and extracurricular programmes. These include poor role modeling by teachers, families and communities; breakdown of certain protective cultural norms and persistence of others such as the subservient position of girls and women; poverty and unemployment; widespread inter-generational sex and relationships for material and other rewards; and sexual abuse and harassment in and outside schools.² Other environmental factors such as alcohol use and bars, proximity to security forces and development projects were

¹ 48% of learners said condoms were not available or that they did not know whether condoms were available.

² In many schools, learners and staff indicated disturbing levels of abuse and harassment by teachers and peers. Around 16% of learners reported that they had been forced or pressurised to have sexual relationships.

noted in several regions. Children living in child-headed households or without adequate adult supervision were noted to be at particular risk.

Recommendations – HIV Prevention

Current HIV/AIDS prevention initiatives have laid key foundations for success. However, they must be strengthened considerably if they are to achieve the goal of an AIDS-free generation. A bolder, more holistic and long-term approach is needed. HIV prevention will be relevant for many years – an adequate HIV vaccine seems unlikely to be available for 5-8 years at least, and may never be found. Prevention initiatives have to be seen as “core business” and an urgent priority across all components of the sector. Importantly, effective HIV prevention will help to address preexisting problems facing education outcomes, including pregnancy among learners. The following recommendations are made.

1) Mainstream HIV prevention in education

- *Develop a more effective strategy to integrate HIV/AIDS in school, teacher and learner assessments and timetables.* Most aspects of HIV/AIDS education are not examinable or assessed, so they are not prioritised.
- *Strengthen training and guidelines for school, hostel, circuit and regional managers (particularly RACE members).* They must see HIV prevention as a core education responsibility, understand requirements for effective prevention and be able to provide leadership, support and supervision.
- *Consolidate integration of extracurricular programmes (e.g. MFMC) into school routines.* These programmes will be a key component of the response for the foreseeable future. Resistance and lack of commitment by managers and teachers must be overcome.
- *Consider extending the length of the school day.* This could facilitate effective timetabling of HIV/AIDS activities and reduce unsupervised time, which exposes learners to risk. Extending the school day is already being considered by the MBESC independent of HIV/AIDS.

2) Enhance programmes in primary schools and Early Childhood Development. It is widely accepted that reaching children with HIV/AIDS related messages before they become sexually active is both essential and feasible for behaviour change.

3) Strengthen life-skills teaching capacity and capabilities

- *Ensure that dedicated posts are available to provide capacity in all schools* (with sharing of posts between schools where necessary) to perform life skills and other pastoral and guidance functions. Consider using resources such as secondary graduates, retired teachers, non-teaching staff and other volunteers to overcome capacity and skills limitations in the short and longer term.
- *Improve selection of life-skills teachers.* This is often based on who is “left over” after other roles are allocated, rather than aptitude or need for continuity, coherent career pathing and programme development.
- *Improve ability to use participatory approaches and materials.* Stronger training and support systems are required so teachers can deal confidently with the diverse and evolving knowledge needs and risk situations confronting learners.
- *Strengthen peer education approaches.* These seem to be powerful and successful. However, particular models such as MFMC require further evaluation to ensure greater effectiveness. Structured, ongoing support of peer education groups by designated teachers must be seen as a critical contribution by schools and other education institutions.
- *Strengthen approaches and capacity for training and support.* Cascade approaches to training have been disappointing, and strengthened in- and pre-service training is critical.
 - Teachers must become more than information disseminators. They should be confident facilitators of open discussion and problem solving within and outside schools.
 - Reinforce theoretical training with practical training to increase confidence in flexible approaches, and in managing relevant social dynamics in the communities.

- 4) **Prioritise life skills programmes aimed at staff as a way to reinforce learner prevention.** HIV/AIDS raises unresolved personal issues and anxieties for many staff, making them less effective life skills teachers and role models.
- 5) **Strengthen curriculum and content.** Materials and the curriculum are widely considered to be repetitive, unchallenging and unable to respond to needs for more detailed, explicit information and skills. Greater variety and depth of materials is needed. Key issues that need greater emphasis include:
- *Life skills and behaviour change rather than factual knowledge.* Deeper factual knowledge is required, but programmes must resist educator tendencies to gravitate to technical issues and neglect building skills to confront issues such as socio-economic and peer pressure, gender relations and desire for status.
 - *Resolving unnecessary conflict and confusion between abstinence and safer-sex messages.*
 - *Reinforce positive messages.* Many staff and learners express despair and feel that HIV infection is inevitable. Many learners who are probably *not* infected assume that they are. In schools and in many materials, HIV/AIDS prevention is often characterized by “scare tactics” and learners get little input on positive living with HIV/AIDS. Such approaches have been shown to have limited effectiveness, undermine counselling and support particularly when the same teachers are responsible for prevention and support, and leave affected and infected learners feeling disempowered.
 - *Care and support, and development of coping skills.* Many learners already face care and support issues in their own families. Active involvement in care and support can be very empowering.
 - *Sensitivity to language and cultural variations.* Language barriers and failure to address cultural issues were often identified as a problem with current materials. Examples of culture as an underutilized resource to reinforce HIV prevention were also frequently cited.
 - *Involvement of adolescents in material development and revision.* Adolescents’ contributions are critical to ensure relevance and responsiveness of materials and approaches.
 - *Education on human and children’s rights and obligation,* to empower learners and deter abusers.
 - *Strengthen infusion of HIV/AIDS into other subjects.* However, international experience emphasizes that this can reinforce but not replace life skills programmes.
- 6) **Actively address sensitive issues.** Cultural, parental and staff sensitivities tend to be avoided rather than addressed, and seem to often be used as an excuse for inaction.
- *Create empowering policy and staff education on condom distribution.* Current confusion on policy around access to condoms in schools is a major problem in the context of widespread sexual activity of learners and inaccessibility of condoms from other sources.
 - *Ensure that Circuit, Cluster and school leadership have the relevant knowledge, skills and policy support* to engage communities to dispel myths and negotiate progress to protect children.
- 7) **Involve learners in decision making** through representative councils and other mechanisms.
- 8) **Ensure safe and supportive institutional environments.** At a minimum, the education sector should intervene to ensure safety of learners in environments under its direct control.
- *Refine a policy on zero tolerance* of sexual harassment and disseminate it to all staff and learners.
 - *Streamline reporting, management and discipline systems* around harassment and abuse. Provide practical information to all children and teachers on how to access these systems.
 - *Assess safety of hostels, community boarding and school events* and develop feasible responses to reduce risk. Consider employing full time hostel managers to enhance supervision.

- 9) ***Address external community and family environments more effectively.*** These environments and norms often undermine rather than reinforce the HIV/AIDS messages promoted in schools. Particular challenges include intergenerational sex with older partners.
- *Reinforce engagement of parents and communities.* Enhance skills and mandates of educators to deal with issues such as cultural or other obstacles to HIV/AIDS prevention. Work with communities to build on traditional systems such as “Shinyanga” to change group norms.
 - *Encourage the use of schools for community networking between parents, elders, NGO’s etc.*
 - *Ensure that schools actively address high-risk environments, e.g. trucking areas, kuka shops and bars, local construction projects and barracks.*
 - *Develop national and local strategies to actively address risk of learners with absent parents.* These include those boarding in the community and living in child-headed households.
- 10) ***Enhance monitoring and evaluation of implementation.*** Improved, ongoing monitoring and evaluation will be critical to enhance coverage and effectiveness of HIV/AIDS programmes.
- *Consider the roles of learner and community involvement* in monitoring and evaluation, to increase ownership and provide qualitative data needed to understand successes and obstacles.
 - *Include routine reporting* on resources and implementation in EMIS and other routine systems.
 - *Enhance dissemination of information* to stakeholders at all levels.
- 11) ***Strengthen coordination and inputs of other sectors and programmes.*** Other sectors and multiple programmes will be critical components of effective education responses for the foreseeable future.
- *Improve coordination between prevention programmes.* Even at national level, major programmes coordinate inadequately, limiting synergy across programmes and Directorates.
 - *Ensure more efficient coordination and use of available resources of key role players at all levels.*
 - Engage *health services* more effectively to ensure youth friendly Reproductive Health Services, condom access and technical support.
 - *Strengthen NGO inputs* through systematic cooperation. Ensure that policies and systems support use of NGOs for training and support in addition to direct service provision.
 - Reinforce *cross-sectoral capacity development and support.* Build on some regions experience of coordination with health services, social workers and NGOs³.
 - *Investigate potential synergies with voluntary counseling and testing (VCT) programs.*
 - *Reduce unnecessarily bureaucratic barriers* to involving external partners.

Orphans and Other Affected Children

The greatest impact of the HIV epidemic on pupils and students while they are in Namibia’s schools and other institutions will be through impacts on their families and households. Orphans will be the most obvious affected group, but other children may be affected when their households take in orphans or support other family or community members. A number of communities, NGO’s and other sector players are already responding to the needs of orphans and other vulnerable children, and can provide examples of best practice and opportunities to build on existing foundations.

Numbers of orphans

Projections indicate that the total number of children in Namibia who have lost at least their mother to AIDS, will rise five-fold from 2001 levels of around 24 000 to around 132 000 in 2010. Orphans will

³ For example the Ministry of Health and Social Services in Ondangwa West is working with schools to train teachers in guidance and counseling and had delivered training to 90 teachers at the time of the interview.

be concentrated in school-going ages. For 2001, less than 5% of children of all ages are estimated to have lost their mothers to AIDS. However, rates among 5-9 and 10-14 year olds are expected to rise to almost one-in-six and one-in-four respectively by the end of the decade. There is potential for them to rise to levels of one-in-three among 10-14 year olds thereafter. In some regions, schools and classrooms, rates of orphanhood can be expected to be much higher than these average levels.

Empirical data on the number of orphans in Namibia is very limited. No systematic orphan enumeration has been conducted. Among Grade 10 learners in the school survey, around 13% of children in the sample reported that they were maternal orphans, and 8.5% were double orphans. Of the two-thirds of teachers who could provide estimates of maternal orphan numbers among learners, one half thought that rates were under 5%. A third estimated levels of 5-10% and one in ten thought they were 10-25%. Levels were generally higher than projected, suggesting that orphanhood is already a significant issue in schools that warrants a response ahead of the projected increases in orphan numbers

An important finding is that there is wide variation around average levels of orphanhood, with very high levels in some schools. The proportion of maternal and double orphans in Grade 10 ranged up to 50% and 30% respectively in schools, and median rates were markedly higher in the north (14.2% and 10%) than in southern and central areas (6.7% and 0%).

Impacts of Orphanhood on Education Outcomes⁴

Orphans' schooling can be affected through economic stresses on their households, psychological impacts that are a result of changes in family structure and functions that involve new responsibilities to care for the sick, the elderly or siblings, as well as loss of parental guidance and interest in children's education.

Dropout or failure to enroll is the grossest manifestation of impacts of orphanhood on education. International evidence indicates that orphans tend to have lower enrollment rates than children with both parents alive and their disadvantage can be substantial – around 30% lower or worse. However, studies suggest that orphans do not always have substantially lower enrollment rates. Impacts seem to vary widely, depending on social, economic and cultural circumstances. Household income may be a stronger predictor of non-enrollment than orphan status *per se*.

In Namibia, there is limited data on orphan drop out and attendance rates. However, there are strong indications from qualitative work and the school survey that a significant number of orphans are affected by drop out. Twenty nine percent of the learner sample knew children who had dropped out for over a month after a parental death and 26% knew of permanent drop outs after parental death. Among teachers, 11% said that parental death was an important reason for dropping out of school. Anecdotal reports of good learners who had dropped out after parents died were common. A previous survey found that significant numbers of drop outs, independent of HIV/AIDS, are due to factors associated directly or indirectly with levels of parental support, a cause for concern.

Other impacts of orphanhood on education outcomes have frequently been noted, although understanding of them is still at an early stage. Many reports indicate that orphanhood, particularly due to a stigmatized disease such as AIDS, can substantially affect performance, completion rates and general development of learners. Contributing factors include erratic attendance due to household circumstances; poorer concentration due to hunger, household demands and psychological impacts;

⁴ The methodology of this study could not rigorously quantify effects of orphanhood on education outcomes. School-based samples of children may under-represent children disadvantaged by parental death if some have dropped out. Effects may also be under-estimated if educators and learners are not sensitized to orphan issues.

and emotional/behavioural disturbances. Effects of orphanhood on children may only manifest after many years but could have important long term social consequences in many communities.

In the school survey, 46% of surveyed teachers said that learner performance drastically declines if a child is orphaned, and another 41% said that performance declines somewhat. Informants gave many reports of children who were clearly severely stressed by loss of parents despite still being enrolled.

Girls may be at higher risk of adverse outcomes. Recent analyses of data from other countries suggest that impacts of orphanhood on enrollment of girls does not appear proportionately greater than among boy orphans in many countries, and tends to mirror general gender inequities in enrollment. The school survey, EMIS data analysis and qualitative data provided no clear indications of whether boys or girls were more heavily affected by orphanhood. However, focus groups often felt that greater household burdens, pressures for early marriage and/or parenthood, and risk of abuse, sex work or other high risk sex among female orphans make them vulnerable. Pregnancy has been identified as a major cause of drop out in Namibia, suggesting that these types of risks are significant considerations.

Vulnerability of orphans at different ages or stages of schooling may differ. There is relatively little information on these aspects of impacts. Data on drop out rates and causes, and other sources suggest that norms around schooling, household roles as producers and carers, and psychological vulnerabilities, differ according to age. So education of children at different ages may be affected differently.

Important underlying problems that create obstacles to education of orphans and other vulnerable children that emerge from Namibian and other data include the following:

- *Material needs.* These include temporary or longer-term inability to pay for school-related needs including uniforms, levies, fees and materials. However, lack of resources to meet basic needs such as food and shelter is also a common reason for learners to drop out or perform poorly.
 - Inability to pay fees was seen as an important reason for drop out by 23% of secondary and 8% of primary teachers.
 - In several areas, tendencies for orphans and vulnerable children to prioritise finding work to address basic needs was noted, particularly in households headed by children or grandparents. Need to earn money (35%) and work at home (23%) were commonly cited for secondary boys by teachers, with generally lower levels for girls.
 - Hunger was noted to be a common problem that led to drop out or poor performance in many schools. Around 10% of surveyed teachers cited it as an important reason for drop out. Among Grade 10 learners, 32% reported hunger among children in their households. Rates were lower (27%) among children who lived with a parent during the term than for those who did not (35%).
- *Psychosocial problems.* These are due to stress, grief, self-stigmatization, neglect and abuse, social isolation and discrimination. Studies and informants have often noted that impacts are often worse when children are separated from siblings and when they are given not given a clear idea of plans for their future. Stigmatisation and withdrawal affecting orphaned children were frequently noted. Around one third of learners surveyed felt that families affected by HIV/AIDS were treated badly. Non-physical maltreatment of children from AIDS affected families were most commonly cited, and included avoidance, teasing and neglect. Indications of inability to deal with psychosocial problems, such as lack of motivation, bad behaviour, social problems or substance abuse, though not specific to orphans, were frequently cited as reasons for drop out by teachers.

A number of informants and drop-out studies suggested problems related to loss of parental guidance and socialization to reinforce learning, school-going, and appropriate cultural and other value systems. Orphans and other HIV/AIDS affected children may also be predisposed to fatalism and focus on short-term fulfillment that made them more likely to drop out, perform poorly and engage in high risk activities.

- *Changes in household structure and greater household responsibilities.* While many children already live with people other than their parents, new stresses related to orphanhood were frequently noted by informants. The school survey suggested further dimensions of vulnerability. Around 40% of all teachers were aware of children in their school or community who lived in child headed households, and 6% knew of learners in the school who lived on the streets. Among Grade 10 students, 39% reported that care giving or other household activities had caused them to be absent from school. This was more frequent among maternal orphans (50%) and children who did not live with either of their parents (47%).

Important conclusions about vulnerability of education outcomes to effects of AIDS orphanhood include the following:

- *Orphanhood is seen as a significant problem* by schools, particularly in areas with more advanced epidemics. Stress is affecting orphans, teachers and learners who observe effects on their peers.
- *Even in areas where the HIV/AIDS epidemic is still at low levels, vulnerable children are a significant problem* due to socio-economic and other factors.
- *Material needs of orphans are perceived as the most pressing issue* by most teachers and schools.
- *Orphans' vulnerabilities cannot, for practical purposes, be separated from those of other children in poverty.*
- *Impacts associated with orphanhood often occur before parents die*, due to effects of illness on their households and children's psychological state in the period leading up to the death of a parent.
- *Successful avoidance or management of short-term crises* can enable many orphans to continue successfully with schooling.
- *Pressures on orphans and other vulnerable children are putting them at high risk of HIV infection.* They may be more likely to resort to unsafe sex for material or psychological reasons and are at high risk of abuse and exploitation.
- *There is mixed evidence around whether girl or boy orphans are more vulnerable to educational problems*, but there are strong indications that sensitivity to gender issues should be maintained.
- *Current data may under-estimate the impact of orphanhood on education outcomes* in Namibia, for several reasons:
 - *Many school-staff clearly have limited sensitisation and awareness* around the issue and probably under-report impacts. School based surveys may also underestimate numbers of orphans if many have already dropped out or attend erratically.
 - *Namibia is at a relatively early stage in its orphan epidemic.* At current rates of orphanhood effects may still be difficult to identify in many classrooms. Extended families and other support systems, which are already strained in many areas, may become increasingly strained in future, and important effects such as re-orphaning of children may become more common.
 - *More subtle effects may be difficult to identify at this stage* but may, nonetheless, be important in a schooling system that is striving to improve quality and access. For example, group psychological effects of the epidemic on learners and society may change norms around schooling unpredictably.

Current responses to needs of orphans and vulnerable children

Namibia was the first African country to complete a national Plan of Action for Children and to ratify the Convention on the Rights of a Child. The MOHSS along with NGOs have led most responses to the needs of vulnerable children. This has resulted in progress in many areas, but the overall response has been characterized by fragmentation, lack of coordination, duplication and limited coverage.

In the mid-1990's, the MBESC set up an inter-sectoral task force on educationally marginalised children including war orphans to increase their access to schooling. The policy on educationally marginalised children, which is now being implemented, pays limited specific attention to the impact of HIVAIDS but stresses the need to train teachers to handle orphans' needs. A charter for primary

and secondary schools has been developed, which outlines what every child should expect from the MBESC. The Ministry has produced guidelines and press releases to inform people of the right to exemption from school development funds and hostel fees. However there is strong evidence that many families do not exercise their right to fee exemptions due to lack of knowledge and inefficient bureaucratic procedures. Feeding programmes exist in selected schools with learners from educationally marginalised groups.

At school, circuit and regional level there has been very limited official guidance on school roles related to needs of orphans and other vulnerable children. Most responses have been initiated by religious bodies and the MOHSS through its social workers. Some efforts have been made by regional Special Education Units particularly around fee exemption support, but these measures have generally occurred on an ad-hoc and basis at the discretion of the Head of the Unit. In some regions there has been conflict over the high numbers of children that Social Services were referring to the MBESC for exemption assistance. School level responses have included:

- *Assistance with material needs.* These include obtaining funding for fees, referral of children to social workers and/or NGOs, and cooperation with communities in developing nutrition gardens. Some teachers give ad hoc assistance to children in the form of clothes, food, materials or uniforms.
- *Addressing higher level/comprehensive needs.* Some schools provided in-school counseling while some teachers simply gave children an opportunity to talk. Referral to regional counselors, social workers and community elders in cases of abuse or other more gross problems occurred but was generally infrequent. Some peer groups had provided elements of support.
- *Flexibility to maintain vulnerable children's access to schooling.* This includes not excluding learners who cannot pay fees and accommodating periods of absence by children with household crises.

Several key themes emerge of relevance to improving support to vulnerable children:

- *Schools lack of a tradition of responsiveness to vulnerable children.* Many teachers and schools do not see it as part of their responsibilities to identify or respond to needs of vulnerable children.
- *There is no standard system to identify orphans and other vulnerable children* to enable proactive management of their needs. Teachers tend to recognise vulnerable children's problems late when they manifest as gross "discipline" problems or inability to pay fees. Opportunities to help children avoid crises and to manage issues such as transfer to new schools are lost.
- *A wide range of support functions are needed by vulnerable children and are feasible.* Needs of vulnerable children extend far beyond inability to pay fees or psychological problems. However, responses of a number of communities, NGOs and schools demonstrate that responses are possible.
- *A number of internal and external role players and resources are usually available* to most schools.
- *The capacity of schools and any other role players has to be assumed to be very variable* and no single role player has capacity to perform all functions that are required.
 - *The capacity of other key role players, particularly social services, NGOs and communities is far too limited to meet the scale of needs* reported by schools. Small numbers of social workers often serve vast areas and populations. They are overwhelmed by multiple functions and administrative burdens and cannot cope with rapidly expanding demands related to HIV/AIDS. NGOs also have limited coverage and capacity.
 - *Motivation, skills and capacity within most schools* to deal with vulnerable children is limited. It cannot be assumed that any particular cadre of staff (e.g. guidance teachers) will consistently be able to deal with all vulnerable children issues alone.
 - *Broader support systems for vulnerable children within the MBESC are generally weak.* Regional counselling services are remote, have limited capacity and are not considered to be a real resource by most teachers. They have given limited attention to needs of orphans and similar vulnerable children

- *Particular communities face extra constraints.* For example, community and NGO ability to support vulnerable children has been severely eroded due to the security situation in areas of northern Namibia.
- *Lack of systematic definition of roles, responsibilities, mandates and co-ordination between role players* in and outside of schools is a major obstacle to effective action.

Recommendations – Orphans and Vulnerable Children

Poverty and other social problems lead to poor education outcomes for large numbers of Namibian children. Increasing numbers of orphans and social pressures created by AIDS are already adding to vulnerability, and pose a substantial threat to the MBESC's ability to meet national development objectives. Effective responses will have relevance well beyond the end of the decade.

A more systematic education sector response to the needs of orphans and vulnerable children is clearly needed, even in areas with less severe epidemics. The education sector is strategically placed to interact with vulnerable children, as it has the nation's largest body of professionals and an organizational network throughout the county. This represents a major resource to the nation in reducing HIV/AIDS effects on the next generation.

A. Defining a realistic strategy to address needs of vulnerable children

Experience with needs of orphans in other African countries has led to calls for re-conceptualisation of the school as "*a multi-purpose development and welfare institution*". This challenge is daunting to most education managers and staff. What seem to be realistic responses to this challenge in Namibia?

Guiding principles behind this study's recommendations include the following.

- *Focus on efficient use of existing resources* rather than solutions requiring substantial extra resources, wherever possible.
- *Focus on system development* to allow more efficient use of resources *rather than relying on "capacity development"* which may be required on a huge scale.
- *Build on what has proved feasible* in Namibia and other settings.
- *Flexibility and decentralised approaches are needed* to deal with local or individual limitations, and the scale and diversity of needs.
- *A Human Rights approach to developing effective interventions has major advantages* in ensuring that children's needs are met holistically. The approach includes: making the best interests of a child the primary consideration; ensuring that there are defined, accessible points of entry for children to access support systems; ensuring holistic, inter-sectoral but prioritised responses to meet the full range of priority needs; participation of children; integration of responses with community, family and other key role players; and ensuring accountability at all levels.

Prioritisation of functions of the education sector to preserve education of vulnerable children is needed to make the challenge more manageable. The following basic priority functions are proposed based on their likely effectiveness, the sector's strategic advantages and constraints on it and other role players:

- *Keep children in school* through pre-empting (or managing) crises to stabilise vulnerable children. Bringing children back to education tends to be very difficult, and vulnerable children's needs are much easier to address while they are still integrated into a formal system.
- *Key education sector functions to keep children in school are:*
 - Early recognition of vulnerability.
 - Timely response to prevent drop-out / performance problems
 - Referral to other resources when schools cannot provide support in-house
 - Monitoring of well-being

- *Tackle basic needs and assistance before complex services.* Basic needs were consistently identified as priorities for orphans and vulnerable children. Children who do not have basics such as food, clothing, shelter and fees are unlikely to have successful education outcomes regardless of other services. Many psychosocial problems can be resolved or avoided if stresses related to basic needs are resolved. Sophisticated aspects of psychosocial support and counselling need development but this tends to be a complex challenge and they should not be the immediate priority in responses.

Enabling dropouts to re-access education is another important function. Although this is likely to be less efficient than helping children to stay in school, learner attrition is already a large challenge in Namibia. The MBESC needs to continue to make schools more receptive to re-entry and explore efficient use of non-formal, distance and vocational training so that learners who drop out can still acquire key skills.

B. Specific recommendations – improving support of orphans and other vulnerable children

- 1) *Clarify overall policy and guidelines on the role and obligations of schools, other education institutions and other sectors* in relation to orphans and vulnerable children. Policy and guidelines can build on those developed for marginalised children.
- 2) *Develop systems to identify vulnerable learners.* Schools should administer a social register system to all learners at least twice yearly to identify vulnerable children. The system should be action orientated and schools should ideally have plans for specific responses to vulnerability before it is implemented. Guidelines should be developed to assist teachers to assess learners' vulnerability, prioritise responses and be sensitive to potential gender-related vulnerabilities.
- 3) *Develop “Circles of Support” for each school.* This model for supporting vulnerable children is based on developing networks with available resources inside and outside schools. The network is intended to maximize use of available capacity to respond to the wide range of vulnerable children's needs, and ensure allocation of functions in the most manageable and efficient way. A key objective is to support and coordinate, but not undermine, community and other initiatives. Potential resources are described in the main body of the report. The precise resources that are incorporated into the circle from in and outside of a school may differ according to the capacities and logistical issues prevailing in the school and community.
- 4) *Enhance capacity within schools to coordinate Circles of Support and provide specific support.*
 - *Strengthen the number and skills of Guidance and Counselling teachers* to address vulnerable children issues but avoid over-reliance on guidance and counseling teachers alone.
 - *Build class teacher sensitisation, skills and confidence* to recognise and manage vulnerable children. Consider using capacity of NGOs (e.g. Catholic AIDS Action) for basic training.
 - *Refine roles of national and regional SEUs and regional counselors* so that their expertise and capacity are used more effectively in programme development and school support.
 - *Consider more formal integration of social workers into the education system*, to maximize use of their skills in support of vulnerable children.
- 5) *Consider creation of a fund to finance direct costs of vulnerable children's education including fees, uniforms, and education materials.* Namibia has formal Social Services grant systems and structures. These should ideally form the basis of support for vulnerable children, particularly as many children's most pressing needs extend beyond direct schooling requirements. However, it is clear that social service systems are overloaded and inefficient. Unless their performance can be improved urgently, there are likely to be significant benefits in education sector funds to meet at least school-related costs of vulnerable children, and possibly be a vehicle for more extensive support if necessary. Experience of initiatives such as the Basic Education Assistance Module in Zimbabwe provides some guidance on programme design.

- 6) ***Expand school feeding and nutrition programmes.*** School feeding schemes have proved effective in boosting enrollment and need for feeding is widespread in areas of Namibia independent of HIV/AIDS impacts. Morning meals have also been shown to be associated with better learner performance in some settings.
 - Consider systematic support of income generating activities and nutrition gardens as they may also build solidarity and empower vulnerable children.
- 7) ***Enhance flexibility and responsiveness of school organisation and systems to vulnerable children's needs.***
 - *Ensure effective inter-school referral systems* to minimize disruption and support when learners have to be transferred after a parent dies.
 - *Ensure adequate flexibility in scheduling and rules*, including school hours, responses to being late or erratic attendance, age norms, facilitation of homework
 - *Review hostel and accommodation policy* to ensure support of the most vulnerable.
- 8) ***Involve learners in decision-making, planning and responses wherever possible.*** Learners often have better understanding of their needs and appropriate responses than educators and planners.
 - Reinforce peer solidarity and develop means to communicate information on rights, responsibilities and support systems
- 9) ***Actively support initiatives to strengthen capacity and efficiency of Social Services.*** Social services are currently challenged by major capacity constraints and organizational restructuring. Inflexible legislation, regulations and practices also lead to inefficient responses to vulnerable children.
 - Support greater allocation of resources and capacity to social work functions.
 - Advocate for review of restrictive legislation, regulations, procedures and practices to relieve social workers of bureaucratic burdens and create flexibility for schools or other role players to take on various functions (e.g. certification for issue of birth certificates; monitoring of children on grants).
- 10) ***Mobilise more resources for education sector initiatives.*** The MBESC should advocate for allocation of funding to support an expanded role in support of orphans and vulnerable children. Possible sources include MOHSS allocations to provide for school fees and other basic needs of children as well as other NACOP and donor funds.
- 11) ***Other issues***
 - Develop and disseminate a Code of Conduct on confidentiality and other issues in dealing with vulnerable children.
 - Pay specific attention to gender dimensions of vulnerability in monitoring and response development.
 - Simplify laws and policies and produce user-friendly booklets to inform children of their rights, and teachers of their mandates and responsibilities in relation to vulnerable children.

Needs of infected learners

Education institutions will contain significant numbers of learners who are infected with HIV through maternal transmission around the time of birth, sexual abuse or relationships in their teens. Most children infected at birth will die before the age of five but significant numbers will, over time, reach school age.

The proportion of children and youth who are infected with HIV will vary at different levels in the education system. Projections suggest that among children aged 5-9, less than 1 in 400 students are infected, rising to around 1 in 100 by 2010. Less than 0.5% of 10-14 year olds and around 5.5% of 15-

19 year olds are estimated to be infected. Infection levels then rise to around 20% in the 20-24 year age group. Levels are expected to be quite constant over the decade if risk behaviour does not change.

The proportion of children ill with AIDS, even by 2010, is expected to remain below 0.5% in the 5-9 age group, and will be below 1 per 1000 among 10-14 year olds and 15-19 year olds. It will then rise (but still to fairly low levels) to 1 in 200 in the 20-24 year age group. Death from AIDS is likely to be substantially lower than deaths from other causes in Namibians between age 10 and 20.

The school survey and visits confirmed that AIDS illness among learners is not a frequent or priority issue in most schools. However, they also suggest great potential for stigmatization, isolation and compromised education for chronically ill learners, including those who do not have HIV/AIDS.

Recommendations - infected learners

Significant numbers of learners in the education system will experience psychological stress and stigmatization around HIV infection, and a small proportion will actually be ill with HIV/AIDS. Learners, who are under stress because they fear that they are, or will be infected, may often be more numerous than those who are actually infected. In any individual case the stress for individuals and institutions involved, and potential for violation of rights will be significant. In general, however, prevention of sexual transmission and management of other impacts of HIV/AIDS on learners are likely to be larger challenges and higher priorities.

- 1) Include learners who are infected, or fear that they are infected, in counselling and psychosocial support strategies.*** Networking with resources located in Special Education Units, and outside the sector with NGO's, religious groups, Voluntary Counselling and Testing programmes and other counselling services outside of schools is likely to be a key part of strategy.
- 2) Develop and disseminate policies and guidelines on the following issues***
 - *Accidental exposure to HIV and opportunistic infections.* Universal precautions against accidental infection, and issues around TB and other opportunistic infections are important. However, risk of accidental exposure to HIV infection is likely to be very small. Guidelines must thus avoid provoking unnecessary anxiety about accidental exposure, particularly as this can reinforce stigma and lead to poor care of injured children and staff.
 - *Rights of infected learners' to education and well-being.* Guidelines and codes of conduct should cover issues such stigmatisation, appropriate confidentiality and reasonable ways to reduce obstacles to continued education of infected or ill children.
 - *Approaches to ensure medical and other support for children who are ill with HIV/AIDS in each school.* Relatively few learners will need major medical support, so approaches should be efficient and feasible and mainly rely on networks rather than in-school provision.
- 3) Develop communication and training strategies to build staff confidence*** in managing infected and ill students.

How will HIV/AIDS affect capacity to deliver education?

The education sector is the largest employer in Namibia and in Government. The MBESC already faces substantial challenges to strengthen capacity to improve access and quality of education. There are shortages of capacity at all levels and learner teacher ratios have remained quite constant at around 31 over the last decade, with significant inequity between regions. Much of the teaching force is relatively young, inexperienced and under-qualified.

Most HIV infected educators and other staff can be expected to remain well and lead fulfilling, productive lives for many years before they develop more severe complications associated with

AIDS. The length and quality of their lives can be enhanced by antiretroviral drugs, other treatments and positive approaches to living with HIV/AIDS. With better understanding of impacts of HIV/AIDS on employees and the function of the education system, it is possible to actively reduce negative effects in both areas.

Susceptibility of staff to infection

Namibia's education sector employees are at substantial risk of HIV infection, like any other workforce in the country. As there is no HIV prevalence survey data for educators, it is uncertain whether they are at higher or lower average risk of HIV infection than other adults in Namibia. There is mixed evidence on educator HIV risk from other countries. Educators are often cited as having higher HIV infection rates than other adults. However, HIV risk is strongly determined by the age and gender profile of employees. This, rather than higher risk behaviour *per se*, may account for differences in HIV infection or death rates that have been found in some comparisons of teachers with other groups. Furthermore, other protective factors may put teachers at lower average risk in Namibia. Teachers are a relatively well informed (the 2000 DHS found that HIV/AIDS knowledge was higher among more educated Namibians). They are also relatively empowered and probably more able than the average Namibian adult to reduce their risk once they are informed and recognise their own susceptibility to HIV infection.

Nevertheless, 63% of Namibia's teachers were aged under 40 in 2001, and of these 60% were female, suggesting relatively high risk of HIV infection. In addition, discussions during regional visits suggested that many education managers and staff still have inadequate basic knowledge and awareness around HIV/AIDS or are in denial. Concerns were identified about risks to teachers due to low access to HIV/AIDS messages, alternative entertainment and condoms in rural areas; relative wealth and status in the community; and separation from spouses or other partners.

Levels of infection, illness and deaths

Data on illness and death trends among education sector employees is limited. Anecdotal evidence from schools and the pension fund, particularly for northern regions suggested increasing occurrence of illness and deaths among younger staff. In the 116 schools that supplied data, the death rate averaged 1.5 % per annum over the previous 2 years, with a higher rate (2%) in the North. A rate of 1.2% for combined death and ill health retirements among educators was reported by the GIPF for 2001, and crude estimates suggest that around one quarter of deaths among public servants were AIDS related by 1999. Though a gross "HIV/AIDS pattern" of high death rates among young teachers has not yet emerged clearly across the whole system, survey data suggests that the median age of death was quite low at 37 years for women staff and 40 years for males.

Projected impacts of HIV/AIDS on Educators

Projections of rates of HIV infection, AIDS illness and deaths were performed for teaching staff listed in EMIS data. Estimation of HIV/AIDS risk was based on their age; gender and geographic distribution profile and assumed that educators risk is no different to that of equivalent adults in the general population. A further scenario was produced to identify the effects if 85% of educators with AIDS access antiretroviral drugs (ARVs) after 1997, as current medical aid entitlements mean that there are few barriers to access these treatments by educators.

Projections suggest that around one-in-seven educators are HIV infected in 2002. Levels reach one-in-four in Katima Mulilo, the region with the most advanced epidemic. In all areas rates have the potential to increase markedly if risk behaviour does not change among educators and trainees.

Projections indicate that the AIDS epidemic among Namibian educators is at an early stage. Projected annual total death rates without ARVs are equivalent to around 1.4% of educators in 2001, and reach almost 3.5% by the end of the decade. Under the ARV scenario, 2001 death rates for all causes would be around 0.7% rising to around 1.4% by 2010. Projections indicate that HIV/AIDS deaths accounted

for between 60% and 20% (ARV scenario) of all deaths among educators in 2001. The cumulative loss of educators to AIDS between 2002 and 2010 under the ARV and non-ARV scenario could be 860-3 360 respectively, equivalent to between 5% or 19% of the current workforce.

Key conclusions, which can be reached from projections, include the following.

- 1) *There is potential for continued growth in infection rates among educators* if prevention among educators and trainees is not effective.
- 2) *Death rates could rise substantially over the decade and result in a cumulative loss of a high number of educators in the absence of ARV access.* In the no-ARV scenario, replacement of staff who die of AIDS could absorb around half the expected graduates of teacher training colleges from 2002-2010.
- 3) *ARV treatment can massively reduce the rise in death rates and cumulative loss of teachers.* They can also narrow the range of uncertainty about AIDS death rates that have to be considered in planning.
- 4) *Under ARVs scenarios, a rapidly expanding number of educators on chronic medication will accumulate.* Due to reduction in the number of people who die of AIDS each year, up to 3000 educators could be on ARV treatment by 2010, and will probably require systematic support to ensure good treatment outcomes.
- 5) *Considerably higher (or lower) than average rates of death and illness may occur in many schools, circuits and regions, either in a given year or over time.*⁵

Impacts related to infected and affected staff

HIV/AIDS impacts on staff of most Namibian schools have been relatively limited so far, as would be expected given the stage of the epidemic. Even in more affected regions, many schools have limited experience of death and illness among educators, although rising death rates in families and communities are having indirect impacts on many staff. In addition, while some managers and educators are deeply concerned by death and illness among staff and their families, others seem to be in denial or clearly have difficulty talking about the issues openly, particularly in relation to themselves or colleagues. In the school survey, schools that had already experienced staff deaths tended to report more difficulties associated with death and illness of staff.

Region visits, the school survey and experience in other countries suggest a number of impacts of illness and deaths on schools.

- *Significant anxiety and stress* of infected and affected staff. This results from combinations of grief, extra workloads, stigma, fear of personal infection or illness, and care of family members. Some teachers and managers expressed despair and desperation at rising levels of illness and death, as well as the lack of information on what the MBESC is doing about HIV/AIDS and its impact on educators. A number of informants suggested that female teachers bear a disproportionate burden due to traditional caring responsibilities in their families.
- *Higher levels of absenteeism.* Surveyed school heads reported rising trends in absenteeism for funerals (60% of heads in the north; 31% in south and central areas) but no clear trends emerged for absenteeism due to other causes. In Caprivi, 40% of heads cited funerals as the most common reason for absenteeism. However, the main reason cited overall by school heads for staff absenteeism was employee illness (55%), followed by funeral attendance (23%). About 3% of staff had reportedly taken more than 15 days sick leave in 2001 (range 0-40% between schools) with slightly higher levels in the north.
- *Poorer quality of teaching by chronically ill teachers.* A number of reports were encountered of teachers who continued to try to teach even when they were debilitated. Informants noted that some teachers perform poorly for more than a year before they die.

⁵ Most schools surveyed reported no staff deaths over two years, but a number of schools reported two deaths and one reported five.

- *Loss of skilled teachers and complications in staff replacement, allocation and distribution.* Lack of qualified teachers was frequently cited as a problem independent of HIV/AIDS. Current rates of staff attrition from all causes in surveyed schools were 7.5% per annum, with higher rates of 8.5% in northern regions.⁶ Heads reported that it took an average of around 3 months, but went up to one year to fill vacant posts. Particular difficulties in replacing skilled teachers were noted in remoter areas and for certain subjects such as mathematics and science. Northern schools appear more vulnerable to loss of staff: 30% had at least two vacant posts.
- *Deaths and illness among managers were not frequently reported*⁷. However, impacts of vacant management posts in and above schools were reported to be particularly disruptive to school function and have “multiplier effects”. Difficulties filling posts for school heads and HODs were frequently noted, and 8% of surveyed schools already had no school head.
- *Greater complications of inadequate relief teacher system.* Most schools have difficulty funding relief teachers, as their Boards cannot afford to pay for them. Heads reported that when a teacher is absent learners are most often attended to in their class by another teacher (46%), but in 34% of them reported that they join another class. Around 14% of coping mechanisms included supervision by older learners, community members and support staff, or children staying in classrooms on their own.

Many informants suggested that these factors have significant impact on system function and quality of education. Many informants among students, teachers and managers indicated that continuity of learning was disrupted. Seventy two percent of heads reported that staff absenteeism was a serious problem or sometimes a problem to the quality of education at the school. Absenteeism was considered a serious problem more in the north (43% of heads), and particularly Caprivi (60%), than in the south/central areas (23%). Twenty one percent of surveyed learners reported that they had had no teacher in at least one subject for four or more days in the preceding two weeks. Some learners indicated that they were traumatized by illness and loss of their teachers.

At the Circuit and regional levels, several managers complained that they had much less time for strategic planning, working on academic issues and skills building because of the demands of finding replacements for teachers who were ill or had died, as well as identifying funds for destitute children.

*Estimates of cost implications of HIV/AIDS among staff suggest several important conclusions.*⁸

- *Pension fund costs* are reported by the GIPF to be unlikely increase substantially due to HIV/AIDS. This is, broadly, because current benefit structures mean that earlier payments for illness and death of staff are offset by reduced payments for pensions in future.
- *Medical aid costs* are likely to be the single largest HIV/AIDS related cost. However, ARVs are a potentially affordable strategy for the education system. Projections of ARV costs are subject to many assumptions but suggest that, by 2010, an efficient programme could add the equivalent of N\$ 28 million to the annual cost of employment for teachers, or around an extra 2% on expenditure on primary and secondary education.⁹ Cumulative costs between 2002 and 2010 would be of the order of N\$146 million.
- *Costs of extra teacher training to replace staff who die of AIDS* need to be estimated using the teacher provisioning model being refined by MBESC. However, if training college output has to

⁶ GIPF reported a total 3% attrition rate from the education system. This suggests that deaths rates in a no-ARV scenario could substantially increase administrative burdens and capacity constraints above current levels.

⁷ In countries with more advanced epidemics lower levels of illness and death among management staff have also been noted. This seems in large part to be due to their older average age.

⁸ All costs are stated in constant 2002 prices.

⁹ This assumes a cost of N\$ 9200 for ARVs and monitoring per patient per annum and 85% uptake. Note that costs continue to rise after 2010 in the absence of behaviour change, lower prices or new technology.

be increased by the full number of projected teacher AIDS deaths from 2002-2010, the projected costs would be around N\$ 135 million under an ARV scenario and N\$ 35 million with ARVs.

- *Absenteeism costs* will often be hidden and manifest as declining quality of education. However, costs of well-managed *relief teacher systems* targeted at AIDS illness and schools in greatest need seem potentially affordable. If relief teachers cover all absenteeism due to illness among staff, estimates suggest that the cost would be unlikely to exceed the equivalent of 1.7% of teacher payroll even under a non-ARV scenario.¹⁰
- *Other costs such as costs of transfers and delays in replacement of staff are likely to be lower than for illness related absenteeism.* However, with reported average delays of 3 months in appointment of replacement staff to schools, this could add a further 50% to the above estimates of costs of absenteeism due to illness.

Recommendations – internal impacts

Several important conclusions emerge from the experience in Namibia and other countries.

- *Effects of illness and death on staff impact substantially on many schools and classes.* The schools that tend to be most vulnerable tend to be those in traditionally disadvantaged situations. They include those that are small or remote, in poor communities, and which have multiple sick members or affected members of staff.
- *HIV/AIDS alone is not destabilizing the whole education delivery system thus far, and seems unlikely to have disastrous impacts on overall delivery in any given year.* HIV/AIDS tends to exacerbate pre-existing challenges to quality and access, but is not necessarily a dominant factor at system level. However, many schools and classes may be much more severely affected.
- *Cumulative effects of unmanaged HIV/AIDS impacts on staff threaten to be a significant obstacle to system performance.* The epidemic will be a further drain on the skills base, institutional memory and morale.
- *Cost implications of HIV/AIDS among staff and important response strategies are significant but probably manageable.* Many important costs are likely to manifest as a gradual decline in accessibility and quality of education if financial and other resources are not allocated to managing them.
- *Many significant impacts may be difficult to pick up timeously from macro-level and quantitative analyses and data.* This should not lead to complacency as it may hide subtle but important trends and severe impacts on education of significant numbers of learners.
- *As the nation's largest employer,* the sector also has a critical contribution to make to the national effort to address prevention and impact management in workplace.

Recommendations to consider on key policy, planning and management issues include the following.

- 1) ***Develop a clear workplace HIV/AIDS Policy and Programme.*** These should provide a framework for dealing with the many components required in the sector response. They should cover HIV/AIDS prevention, care and support, and managing impacts on education delivery in an integrated, holistic way. Impact management should focus in the first instance on *providing care and support to infected and affected staff*, both to respond to their needs as individuals, but also to create an environment that facilitates management of impacts on education delivery.
- 2) ***Develop an effective HIV prevention and life skills programme for educators, trainees, and other staff.*** The goal should be 100% coverage within as short a time as possible. Major spin-off benefits for learner prevention and support are likely.

¹⁰ This assumes that employees with AIDS are absent for an average of 120 days before death. Adequate data to estimate the scale of funeral related absenteeism, compassionate leave or implications of ARV treatment for absenteeism are not available.

- *Programmes should be holistic and build on a clear understanding of critical success factors for workplace prevention programmes.* They should reinforce basic knowledge about HIV/AIDS risk and its impacts, address life skills to empower staff to protect themselves from infection, and deal with issues such as stigma, living positively with HIV/AIDS, care and support.
 - *Structural risk factors related to employment should be addressed as far as possible.* These include quality of accommodation and work away from spouse or other regular partners.
- 3) ***Establish a Wellness or Employee Assistance Programme (EAP).*** This should assist infected and affected staff to deal with stresses created by HIV/AIDS by providing access to counseling, advice and services around issues such as life planning, accessing benefits, disease management, nutrition and positive living, coping with stigma, and testing and counseling. Wellness and EAP's can also provide a mechanism to inform managers and planners about the scale and types of HIV/AIDS related problems without compromising confidentiality of individual employees. Coordination with other Ministries, unions and private sector providers should be considered to ensure development of an efficient, feasible and accessible system in all regions.
- *Voluntary counselling and testing* should be promoted to reinforce prevention and impact management. However, it will be difficult for the Ministries to actively encourage until they have clarified supportive responses
- 4) ***Strengthen medical aid cover and access to ARVs.*** The education sector should actively engage with processes that are reviewing PSEMAS. ARV treatment for teachers is a key strategy to meet employees' needs, preserve system function and limit risk of skills shortages. The extra costs are potentially "affordable" and teachers are likely to be a group in which treatment has relatively high success rates. However, costs and effectiveness of treatment depend heavily on efficient management of care. Under the current Act and regulations, PSEMAS benefits are unmanaged and cost control is already a problem independent of HIV/AIDS. Specific strategy may be needed to ensure ARV access for teachers in remoter areas.
- 5) ***Review pension benefits and administration.*** HIV/AIDS fundamentally changes the profile of needs to be met by the GIPF. Increasing numbers of much younger staff, often with short service, young dependents and very limited entitlements, will require support. Benefit structures should be reviewed to ensure that they meet social, employee and financial sustainability objectives adequately. A number of different benefit structures may be viable. Personnel officers must ensure that they can provide sound advice to managers and employees on which pension option is best to meet beneficiaries' needs, and process claims efficiently to avoid hardship. Other key issues related to the pension fund's role in ill health management are highlighted below.
- 6) ***Review pre- and in-service training.*** These have a critical role in reinforcing prevention and impact management strategy. In-service training is likely to be increasingly important to supplement HIV/AIDS and general professional skills of new and existing educators.
- *Aggressively promote effective prevention programmes for trainees.* Current efforts should be reviewed and strengthened. Trainee prevention is likely to be one of the most cost-effective approaches to HIV/AIDS over the longer term, particularly as large numbers of staff become infected before they join the teaching service. Programmes should also provide skills related to managing HIV/AIDS impacts on staff and learners.
 - *Review the number of teachers to be trained.* Projections should be used with the teacher provisioning model which is being refined by MBESC to more clearly define requirements for teacher training over the next decade.
 - *Review the structure and content of training.* A substantial amount of investment in teacher training will be lost due to HIV/AIDS and there may be need for rapid training of teachers. Course duration, structure and content may warrant modification to ensure that they are *cost-effective and flexible* to respond to these needs without compromising quality of outcomes. Curricula will need to consider *new competencies* that may be required of educators, for

example HIV prevention, vulnerable children support, and possible needs for large-class skills. Greater emphasis on *management skills* may be required to equip more staff to take on management roles in view of attrition among current and future managers. *Other issues* for consideration include review of approaches to specialised training to increase flexibility to accommodate loss of specialist subject teachers, and training to address needs of out-of-school youth and adults who have had interrupted education.

- *Consider cost effective ways to build skills* of relief teachers and other resources such as community members who are used to cover for absent staff.

7) ***Strengthen management of absenteeism and ill health.*** In many instances, absenteeism and ill health are simply not managed. Absenteeism is a major problem independent of HIV/AIDS. School managers have difficulty enforcing controls. The current situation has negative implications for infected staff, who face great uncertainty and work well beyond the time when they are severely ill. There are also negative impacts on education delivery and on their colleagues. Several issues need strong consideration as part of a coordinated approach to the problem.

- *Review sick leave entitlements.* Strongly consider reducing the routine amount of sick leave entitlements to ensure that an employee's health status is confronted and active management of ill health absenteeism begins before negative impacts result for learning and affected individuals. Granting of further special sick or disability leave should be possible after assessment, with further structured review. It is important to ensure that ill employees can continue to teach if they recover and are not permanently incapacitated.
- *Streamline medical boarding and disability management processes* to ensure fair, timeous assessment and review. Education should engage with the GIPF, MOF, MOHSS and OPM to:
 - *Review the Medical Boarding system* and consider development of a full disability management programme. Boarding is often too slow to protect employees and delivery. It is also uncertain whether appropriate decisions are being taken in cases of complex and fairly unpredictable diseases such as HIV/AIDS.
 - *Ensure that pension entitlements do not obstruct timely application for ill-health retirement.* Currently, many staff have a financial incentive to keep working well after they are disabled. Options such as full pay during the initial months of retirement may resolve this and could be affordable.
- *Review and monitor compassionate leave and funeral attendance entitlements* and systems. These are clearly becoming major issues for managers in Namibia.
- *Create effective relief teacher and other systems to cover for absent staff.* Efficiently managed relief teacher systems seem potentially affordable and respond to a major problem in education delivery. They should be responsive to shorter-term, unpredictable and intermittent absenteeism and needs to boost skills of relief teachers. Consider development of new budgetary mechanisms, pools of relief teachers, preferential access of relief teachers to career development, and targeting of available resources to vulnerable schools.

8) ***Strengthen HR and other management systems and capacity.*** To a large extent, the education system currently provides for personnel administration rather than human resource management. Training to build confidence and competence of line and HR managers in basic human resource management and development will help them to deal with many of the impacts of HIV/AIDS in addition to improving general system performance. Specific systems that need to be strengthened include the following:

- *The Cluster system.* This can be expected to reinforce schools' ability to manage various impacts of HIV/AIDS on staff through sharing and building capacity and expertise.
- *Succession planning.* This is a key approach to facilitate skills transfer and avoid unnecessary delays in appointments to reduce service disruption due to absence or death of staff.

- *Efficient recruitment, appointment, redeployment and transfer systems and practice.* These become increasingly important. Incentives and other systems need to be considered to fill key managerial and technical posts as well as vacancies in remote or “unattractive” schools.
 - *Other innovative means of skills sharing and transfer.* These include teamwork approaches and improving routine and other communication.
 - *Performance appraisal systems.* Consider possibilities for targeted or general performance appraisal systems. These can help to ensure fair assessment and management of incapacity among infected staff and reward exceptional effort by colleagues who cover for them. Systems need to deal with potential for fairly rapid decline or fluctuations in performance.
- 9) **Identify vulnerable workplaces and work processes for targeted interventions.** All levels of the MBESC, MHETEC and institutions should undertake a systematic review to identify workplaces and work processes that are most vulnerable to absence or loss of staff due to HIV/AIDS. Specific strategies should be developed to address these vulnerabilities.
- 10) **Improve information.** Many aspects of HIV/AIDS impacts on the education system capacity remain unclear and better information is required.
- *Active tracking of illness, death, absenteeism and medical aid/ARV use* among staff is critical.
 - *Consider an anonymous, unlinked HIV prevalence survey* among teachers and trainees to clarify levels of infection and help to mobilise positive responses.
 - *Regional, circuit, cluster and institutional level monitoring and analyses* will be important to ensure quality data, identify impacts that are not apparent from aggregated data, and facilitate quick responses.
- 11) **Capacity and coordination of employee impact management.** *Personnel Administration should inherently take a major role* in developing the HIV/AIDS policy, programme and review of conditions of service. The process will require dedicated capacity as well as involvement of stakeholders such as the Staff Advisory Committees.
- *Coordination with other stakeholders* such as the PSC, OPM, Health, Finance, other departments, unions and the pension and medical aid schemes will be important in defining overall strategy and to develop and implement specific components of the response.

HIV/AIDS effects on the role of other specific education components

Special Education

Special education has key expertise in programme planning and responding to special needs of learners including providing guidance and counselling services, networking with other sectors and HIV/AIDS education. The MBESC should consider ways to strengthen, utilise and possibly integrate special education and DATS resources more effectively in HIV/AIDS initiatives and structures at all levels. Several issues warrant particular attention.

- *Reviewing and reprioritizing roles of SEU capacity in the regions.* At present regional counselors are seen as very inaccessible by many schools and teachers. It seems critical that their skills are leveraged more effectively into schools through system development, teacher training and support for early recognition and management of vulnerable children. There seems to be great potential for counselors to focus more systematically on prevention and early intervention rather than on learners referred at stages when they are severely stressed or manifest “discipline and behaviour problems”. There also seems to be room for some shift of emphasis from psychological counselling towards intervening proactively on basic social, economic and family issues that predispose to psychosocial problems.
- *Counselling and Support Groups* in schools should be evaluated and used to develop a more effective platform for response to orphans and vulnerable children, as well as life skills education.

- *Proposals for full time guidance and counselling / life skills posts* in schools made by the Presidential Commission should be resuscitated and refined in line with new strategy to meet the substantial needs of orphans and other vulnerable children, as well as HIV prevention.
- *Particular vulnerability of children with disabilities to abuse and HIV infection, as well as neglect when orphaned* should be considered in planning and service development.

Adult Basic Education and NAMCOL

The Directorate of Adult Basic Education (DABE) covers the National Literacy Programme (NLPN), the Adult Upper Primary Education programme (AUPE), Community Learning and Development Centres (CLDCs) and Adult Skills Development for Self-Employment (ASDSE). A further, but independent programme is NAMCOL which provides secondary level education to out of school youth and adults. Issues raised by HIV/AIDS for adult basic education include the following:

- *The HIV risk of target clients is likely to be particularly high, as is their vulnerability to HIV/AIDS impacts.* This is due to social circumstances of out of school youth and less educated adults, and because women, who traditionally make up most candidates, are generally more vulnerable than men.
- *HIV/AIDS is likely to increase demand for AUPE and NLPN* above levels that would otherwise have been expected if it results in lower enrollment and completion among orphans.
- *The tradition of voluntarism and participatory community linkages* in DABE programmes are a potentially powerful resource in HIV/AIDS prevention and mitigation. Examples of literacy groups that had developed HIV/AIDS prevention activities were noted.
- *Income generating activities are a key intervention* to support HIV/AIDS affected individuals and households.

DABE programmes and NAMCOL are important resources in HIV/AIDS prevention and mitigation, due to their unique linkages into disadvantaged and vulnerable communities and client groups. Key recommendations for consideration by DABE include the following.

- *Increase emphasis on effective HIV prevention programmes for learners.*
- *Develop a comprehensive strategy to integrate HIV/AIDS into all programmes activities* to benefit clients directly and to enhance prevention and mitigation in broader communities. Consider linkages with, for example, home based care and voluntary counselling and testing initiatives.
- *Explore ways to expand the ASDSE programme* to contribute to support for people infected and affected by HIV/AIDS.
- *Consider possible changes in the age profile and educational needs of the DABE and NAMCOL client base.* More candidates may be younger or need of support for education in higher grades.
- *CLDCs can play important roles as hubs for community activities.* Ways to enhance their role in HIV/AIDS prevention and care among their clients and communities should be explored further.
- *Possible over-extension of school staff who also work as NAMCOL tutors* should be monitored more closely in view the potential for HIV/AIDS to deplete school staff compliments, at least temporarily.

Consideration should also be given to strengthening *distance learning materials and techniques* both for adult basic education programmes and to support learning in schools and classes where teachers are absent. NAMCOL distance learning materials were noted to be widely used by school learners.

Hostel management

Hostels are an important means of ensuring access to education and are a high cost component of the education system. The hostel system already confronts significant challenges including limited capacity, skills and enthusiasm of staff, infrastructure deficiencies and limited administrative controls. HIV/AIDS raises several challenges for the hostel system.

- Many hostel environments clearly put learners at high risk of HIV infection due to poor infrastructure and security, limited control and supervision, abuse of learners by staff, and limited condom access.

- Children boarding out in communities around schools are subject to poor adult supervision, high risk of abuse and HIV infection, and generally poor living conditions.
- HIV/AIDS orphans will increase the need for hostel accommodation for vulnerable children.

The Directorate should consider the following recommendations:

- *Develop a policy on HIV/AIDS* that clearly identifies roles and responsibilities of schools and staff at all levels in regards to prevention, mitigation, and care and support. Include clear policy on condoms and condom distribution in hostels.
- *Urgently improve hostel safety and security*, including infrastructure and systems to report and act on problems.
- *Reinforce accountability and skills* of hostel managers, inspectors and school heads to ensure safety.
- *Develop mechanisms to increase the safety and accessibility of community boarding* where expanding hostel accommodation is not viable. This may include accreditation systems.
- *Review hostel staffing and management*. Supervision should be available at all times after school hours. Strongly consider full time hostel management posts for non-teachers and involvement of responsible community members or groups to enhance supervision, quality and safety.

NIED

NIED has already developed several initiatives to integrate HIV/AIDS more effectively into curriculum and syllabus development for teacher training and schools. HIV/AIDS issues are seen as a major consideration in the Curriculum Review. Full evaluation of HIV/AIDS curricula and syllabi was beyond the scope of this project. However, several important challenges for NIED have emerged. These include:

- *Incorporating a broader range of HIV/AIDS issues in curricula*. These include greater emphasis on positive HIV/AIDS messages, care and support, positive living, counselling and other support of vulnerable children, and ethical and legal issues around teaching and children.
- *Working with National Examinations and Assessment, as well as partners such as the schools Inspectorate and Training Colleges to improve ability to examine or otherwise assess performance in HIV/AIDS education*. This is critical to reinforce prioritisation of HIV/AIDS in the education system.
- *Developing guidelines on processes that facilitate more effective introduction of new curricula and HIV/AIDS related interventions* into schools and overcoming resistance particularly around sexuality education.
- *Working with teacher training partners to:*
 - Evaluate implementation and effectiveness of HIV/AIDS curricula for teacher trainees.
 - Introducing effective life skills programmes for trainees.
 - Increase practical rather than theoretical training in areas such as counselling, support of vulnerable children including inter-sectoral collaboration, and management skills.
 - Re-orientate in-service training from upgrading of qualifications to practical professional skills development in order to strengthen basic education delivery and HIV/AIDS related skills. In service training is likely to be a very critical in developing teacher capacity to deal with HIV/AIDS issues.
 - Develop short course curricula to upgrade teaching skills of relief teachers and volunteers with limited or no formal training.

Planning and development

Planning and Development is responsible for overall planning in MBESC, the Ministry's development budget, collection and analysis of EMIS and other data for planning and monitoring purposes, as well as donor coordination.

The Directorate has a key leadership role in coordinating the plans of the many other directorates and units which will need to respond to HIV/AIDS issues identified in this report and integrating them into overall Ministry and sector strategy. Several specific challenges to the directorate due to HIV/AIDS are raised in this assessment.

- *Infrastructure planning* needs to consider projected HIV/AIDS impacts on learner numbers in different age groups, and has to factor in uncertainties around levels of impacts at more local levels. Plans also need to consider new or more urgent needs of learners such as counselling rooms and secure hostel or alternative accommodation. HIV/AIDS may influence the desired size and shape of classrooms and schools to reduce vulnerability to staff absenteeism and loss.
- *Human resource planning* needs to factor in HIV/AIDS impacts on staff and learner numbers. Staffing norms warrant review to incorporate strategy on issues such as: need to increase dedicated capacity at cluster and school level over time to address HIV/AIDS and guidance and counselling; possible complications if certain schools or workplaces have disproportionately large numbers of ill staff; relief teacher financing and resource allocation mechanisms.
- *EMIS* needs to track HIV/AIDS related impacts on learners and staff. It should also consider building in elements of tracking of key HIV/AIDS programme resources and implementation as part of routine management information. Strategy needs to consider more decentralised, disaggregated analyses and use of information to identify trends and problems that may not be apparent at aggregated level.
- *Research.* Routine EMIS data and analyses will often not provide adequate information to guide planning and allow interpretation of trends in a period of growing changes and uncertainties due to HIV/AIDS. More non-routine and qualitative information will be required to inform planning and monitoring on HIV/AIDS issues that are not amenable to quantitative analysis alone. Opportunities to use projects such as SACMEQ to improve understanding of key determinants and trends of quality in schooling should be explored.
- *Donor coordination.* The Directorate will have a key role to ensure that appropriate HIV/AIDS dimensions are built into support programmes, including raising sufficient funding and technical assistance, where necessary, to initiate and support key aspects of the sector's response.

Sports and Culture

Sport and culture can play several important roles in the HIV/AIDS response. These include promoting prevention by providing alternative entertainment to reduce HIV risk, active promotion of HIV/AIDS prevention and impact mitigation messages through sports events and role models. Sport and cultural activities can also facilitate stress management, socialisation and positive peer interaction for orphans and vulnerable children. Heritage and culture programmes can also play a key role in mobilizing communities around HIV/AIDS issues, reinforcing cultural and other norms that enhance prevention and support, and engaging with those norms that may increase HIV/AIDS risk and vulnerability of women and orphans. Within schools sports and culture can play key roles in creating nurturing environments for children who are at risk of HIV or made vulnerable through HIV/AIDS impacts.

Early Childhood Development

MBESC is responsible for training and curriculum development for Early Childhood Development (ECD) with other aspects falling under other Ministries. ECD has relatively low coverage in Namibia for cost reasons. Training and curriculum development, and discussion with implementing partners, should consider that ECD has important roles in: laying foundations of HIV prevention from early ages in its curriculum; nurturing, caring and socialising young orphans with limited parenting at home due to HIV/AIDS impacts; and relieving older children of sibling support roles so that they can attend school. ECD should also be aware that a significant proportion of their target age group will be HIV-infected and make appropriate responses in terms of support and precautions. Reliance on community funding for aspects of ECD may become more difficult due to economic impacts of HIV on households.

Higher education

Higher Education represents a major investment by Namibia. This sector is the Government's leading agency for human capital development, national technical capacity building and knowledge creation. The major components of the sector include University of Namibia (UNAM), the Polytechnic of Namibia, Youth Development and Employment Creation, Vocational Education and Training, and the four Colleges of Education. Specific issues related to the latter two components are discussed in other parts of the report. Most of the institutions are relatively young and face challenges of rapid expansion and ensuring quality preparation of students for work in the Namibian economy.

Many challenges of HIV/AIDS in higher education are similar to those discussed in relation to impacts on needs and capacity to deliver for the schooling system. Recent reports of impacts at UNAM and other institutions suggest relatively low rates of deaths among students and staff. Some deaths of skilled staff had been disruptive. Projections and experience of tertiary institutions in other countries with advanced epidemics suggest that illness and death rates from HIV/AIDS among students and staff are unlikely to be debilitating to the institutions in any one year. However, over time, the cumulative impacts on higher education staff and students will be substantial.

There are several distinguishing features of the challenge of HIV/AIDS to these institutions.

- *Levels of HIV infection among students have to be assumed to be in around 20-25% based on national prevalence rates.* Reports suggest that the environment in many higher education institutions, particularly in relation to hostels, residences and alcohol, puts students at high risk of HIV infection.
- *The main impacts of HIV/AIDS on the effectiveness of the institutions is hidden* as most student deaths and illness will occur after graduation
- *Lost investment in students will be substantial.* At current infection rates it has to be assumed that roughly one quarter of investment in higher education could be lost to HIV/AIDS deaths, or massive unnecessary human and ARV treatment costs will be incurred. Costs are particularly significant due to high unit costs of education in these institutions and the opportunity cost to Namibia of losing individuals from small pools of highly skilled people.
- *Needs for support of students who are infected and affected can be significant.* Although the number of students who actually have AIDS will be relatively small, the demands and stress on the institutions for care of even individual students with AIDS, can be considerable.
- *Cumulative impacts of death and illness on academic skills and knowledge creation,* due to loss of specialist staff (and promising students), may have significant implications for education quality and attempts to reduce reliance on external staff.
- Particular financial issues may arise in relation to *loans and financial aid* for students.
- *Higher education students and staff are a key resource to the nation in terms of skills to support national and community initiatives* around HIV/AIDS as well as research. Graduates also will need to provide leadership in a society and workplaces that are profoundly affected by HIV/AIDS.

Thus, despite its relatively low impact so far, HIV/AIDS needs to be embraced as “core business” for all institutions.

Despite studies and attempts by higher education institutions to organize responses to HIV/AIDS, progress has been slow and its effectiveness uncertain. Institutions have generally not had holistic, coordinated or sustained strategies to deal with the range of HIV/AIDS issues. HIV/AIDS programmes for staff have been a notable gap. The main limitations on action seem to be difficulties mobilizing academic staff in particular, combined with limited capacity and capabilities, and substantial stigma and denial. The current Education HIV/AIDS Strategy covers development of an HIV/AIDS course for all students in higher education; an inter-institutional structure to coordinate efforts; research on HIV/AIDS; and primary health care and social welfare services to staff and students.

Successful responses are likely to require further refinement of Higher Education components of the HIV/AIDS strategic plan, to cover emerging priorities and give more detailed guidance on what is expected of each institution. Particular recommendations for consideration include the following.

- *MHETEC should provide decisive ongoing support and inducements* to assist institutional leadership to drive an effective HIV/AIDS programme and overcome inertia of staff and students. Coordination with MBESC programmes particularly at regional level should be explored.
- *Ensure that the new HIV/AIDS curriculum is “world class” and is implemented effectively.* Complementary prevention activities and messages to reinforce the programme should not be neglected. These may include issues such as campus safety and harassment, alcohol control, condom access, peer driven programmes and infusion of HIV/AIDS into other courses.
- *Strongly consider institutionalising involvement of all students in outreach prevention and support programmes.* Active involvement and training is likely to strongly reinforce prevention and other skills. Targeting *feeder schools* could have major benefits for the institutions.
- *Consider options such as challenge funds* for students and staff to develop innovative interventions and research.
- *Review planning of student output and curricula.* Pay particular attention to scarce skills areas, teacher training, and courses that face increasing demands due to HIV/AIDS eg. health sciences and social work. Financial support and incentives to do courses such as social work should be reviewed. Also consider options for altering course structure, duration and content to meet any increased needs for outputs rapidly and cost effectively.
- *Reinforce development of a comprehensive workplace strategy and programme* covering all relevant aspects of prevention, care and support and impacts on institutional function. *Initiate a formal life skills/ prevention programme* for staff at all levels and consider *targeted HIV/AIDS training for all academic and management staff* so that they become more effective supporters and managers of programmes.
- *Explore strategy to ensure antiretroviral drug provision to staff and students.*
- *Review the student loan and international bursary systems to ensure that sustainability is not threatened by HIV/AIDS impacts on students.* Ensure that systems and responses respect human rights of students, and that HIV/AIDS induction training for recipients is in place.
- *Consolidate a framework for routine monitoring of HIV/AIDS impacts and responses* including a representative *anonymous HIV prevalence survey* of students and staff.
- *Ensure ongoing networking with other SADC higher education institutions to share learning.*

Vocational Education and Training

Vocational Education and Training falls mainly under MHETC. However, pre-vocational skills are also taught at primary through to senior secondary schools, with agriculture as the most prominent component. In addition to training in Vocational Training Centres which target school leavers, Community Skills Development Centres target unskilled youth with competency-based short courses. Demands for VET have been rising, particularly among Grade 10 leavers and other out-of-school youth. So far, VTC prevention programmes have been limited and attention has mainly been on care and support of sick staff.

VET has been suggested as an important part of responses to orphans and vulnerable children as it may be an accessible way to provide them with economic skills when they are unable to complete formal schooling. However, vocational subjects in schools are not popular with schools or learners, and all levels of vocational training tend to be subject to relatively high costs and shortages of equipment and skilled staff. Particular issues for consideration in relation to VET include the following:

- *Needs for vocational skills in the economy are likely to be increased by HIV/AIDS attrition, and adequate output of VET should be assured.* Private sector training output should also receive attention. Anecdotal reports from SADC countries suggest that some private employers are

reluctant to invest in training due to concerns about loss of investment due to AIDS deaths among trainees.

- *Increasing access to short competency-based and vocational courses in formal schools* may be part of strategy to equip vulnerable children for the world of work.
- *Particular attention should be given to prevention programmes* for COSDEC and other students who may not have been reached by school based programmes and may be at high risk of HIV infection.
- *Scarcity of vocational teaching staff* requires that particular attention is paid to prevention and treatment initiatives for staff, as well as training and incentives to teach if labour market demands become more acute due to AIDS attrition.

Conclusions and strategic recommendations

Since independence, Namibia has made important achievements in economic and human development. The HIV/AIDS epidemic threatens to obstruct further progress and undermine gains already made by society and the education sector. Impacts of HIV/AIDS are expected to increase and accumulate well beyond the end of this decade.

The HIV/AIDS epidemic has profoundly changed the internal and external environment of the education sector. Most importantly, at current infection rates, over one quarter of the nation's investment in education could be lost through premature AIDS illness and deaths among today's learners and students. HIV/AIDS is also exacerbating negative socio-economic and other influences on learners, and compounding weaknesses in ability to deliver quality and accessible education. Impacts are likely to disproportionately affect communities and individuals that are already disadvantaged, obstructing attempts to improve equity. Future assessments of the adequacy of Namibia's response to the epidemic are likely to be based largely on whether it has preserved the lives, development potential and rights of the current generation of children and youth. The education sector represents the nation's largest investment in development, and is uniquely placed and essential to ensure a successful national response to these challenges.

In any single year, HIV/AIDS alone seems unlikely to destabilize the whole system. However, this hides insidious effects on quality and access, as well as severe impacts on many schools and many thousands of infected and affected employees and learners.

There is urgency to act on opportunities not only to mitigate the current and immediate impacts of the epidemic, but also to lay foundations to combat longer-term impacts, that may not be visible at present.

- *HIV/AIDS has to be recognised as "core business" for the whole education sector* for the foreseeable future. All components of education are affected and have roles to play to protect the sector.
- *"Mainstreaming" of HIV/AIDS within all components of the education sector and at all levels* is imperative to address HIV/AIDS effectively. All Directorates and institutions must actively integrate HIV/AIDS into their strategies and actions. Responsibility cannot be abdicated to the proposed HIV/AIDS Unit, other HIV/AIDS programmes or other sectors.

Importantly, *HIV/AIDS presents opportunities not just a threat*. Many aspects of HIV/AIDS responses are consistent with existing priorities, programmes and initiatives to strengthen education independent of HIV/AIDS. HIV/AIDS can reinforce the urgency of need for them and creates opportunities to mobilise support to implement them more efficiently.

The following overall recommendations are made around developing a more effective sector response.

- 1) **Leadership.** Sustained, high profile political, managerial and professional leadership in all components and levels of the education system is critical for effective responses to HIV/AIDS. Leadership needs to inspire staff, give guidance and ensure that action happens. Levels of leadership awareness and commitment vary across the sector, but are often too limited to ensure success.
- 2) **Actively combat stigmatization, secrecy and denial around HIV/AIDS.** These problems are widespread at all levels and profoundly undermine response to impacts on the system or individuals. This requires active participation of leadership as often as possible, as well as systematic creation of opportunities for open discussion of HIV/AIDS issues at all levels.
- 3) **Define roles and accountabilities of various education components and players, and develop guidelines on various aspects of action.** Many HIV/AIDS challenges, including critical issues such as HIV prevention and support of vulnerable children, are new additions to traditional roles. Many role players are unlikely to act without clear definition of their responsibilities. Development of practical guidelines is an urgent priority to guide decentralized action in many areas as soon as policy and strategy are confirmed.
 - *Review education and other regulations, legislation and codes* in a number of areas. This will often be a prerequisite for appropriate action by officials.
- 4) **Disseminate knowledge across the sector and include positive messages.** Basic knowledge of educators and managers is often inadequate and many have little ideas of what can be done even if they are motivated. Communication of information on key aspects of HIV/AIDS prevention, impacts, planning, strategy and best practice is needed to mobilize and sustain responses. Fatalism around HIV/AIDS and other stresses on education stakeholders make it critical to communicate positive messages of commitment, hope and practical steps that can be taken.
 - *Establish mechanisms for networking and sharing of experience and best practices* between schools, clusters, regions and MBESC/MHETEC planners.
- 5) **Ensure decentralised approaches.** Avoid a “top down” approach to developing and implementing responses to HIV/AIDS. Effective action on HIV/AIDS requires clear guidance from a central strategic framework to coordinate role players and clarify expectations. In addition, many specific aspects of action require solutions planned or led from the MBESC.¹¹ However, the overall response depends on motivation and action at school, cluster and regional level. Also, centralised capacity, capabilities and models are unlikely to be able to cope with the diversity of circumstances in schools and the scale of the challenge.
 - *A major part of initial strategy should be to focus on facilitating cluster and school level responses.* This may build on initiatives such as the Basic Education Project (BEP).
 - *Address organisational culture.* A successful sectoral response to HIV/AIDS will to a large extent depend on cultivating caring and willingness of individuals and groups to embrace the challenge, and respond to needs of colleagues and learners. Bureaucratic traditions and tendencies to avoid personal initiative should be combated.
- 6) **Ensure flexibility to deal with uncertainty.** Many aspects of HIV/AIDS impacts and appropriate responses remain uncertain. “Least risk” scenario planning approaches should be used in areas where important uncertainties exist, for example, around levels of impacts on teacher and student numbers. In addition, a key consideration in planning and practice should be how to ensure flexibility in many aspects of education system management to facilitate creative, service orientated responses to unforeseen needs or circumstances.

¹¹ Examples include revising the employment framework, curricula and policy and guideline development.

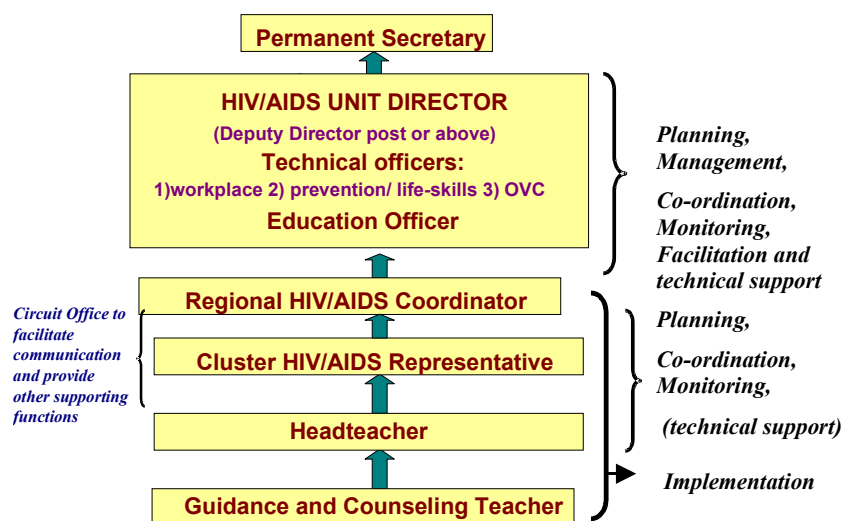
- 7) ***Inter- and intra-sectoral co-ordination and partnerships.*** Many aspects of the responses to impacts of HIV/AIDS on educators and learners require cooperation across education components and with other sectors. It is critical that education sector role players avoid a “silo” mentality in approaching HIV/AIDS issues, and are bold in approaching other role players. However, they must also avoid tendencies to simply “pass the buck” to others.
- *Coordinate with other sectors*, particularly NACOP, MOHSS, Local Government, OPM, PSC and Finance. This will be critical at all levels for efficient strategy and use of available resources.
 - *Coordinate better across Directorates and units within the MBESC and higher education.* For example, coordination is needed on the role of Human Resources in workplace programme development and of the role of SEU in the programme and school responses.
 - *NGOs and community organisations* are key partners. They often have capacity and expertise that is not available within government, as well as flexibility to respond rapidly. Improved coordination and integration of strategy at all levels is required with them, as well as stronger support from government to ensure their sustainability. The education sector may be a good locus for functional coordination of partnerships with NGOs on youth HIV prevention and vulnerable children issues.
 - *Co-ordinate with unions.* Namibia’s teacher and other public service unions are increasingly aware of the impact of HIV/AIDS on members and society and are important allies in confronting the epidemic. However, their members may resist important aspects of change and new roles required, and certain aspects of workplace policy and programmes may need to be negotiated.
 - *Strengthen MBESC HIV/AIDS resources, mandate and management systems for effective inter- and intra-sectoral action.* More effective high-level participation in fora such as RACOC is needed to strengthen coordination with other sectors, enforce decisions and ensure effective reporting. RACEs need adequate capacity and support to define solutions within the sector and with other sectors before presenting proposals to RACOC.
- 8) ***Refine the HIV/AIDS strategic and operational plans.*** The current Education Sector HIV/AIDS Strategic Plan defines key processes and actions in many areas. However, more knowledge of HIV/AIDS issues and experience of implementation barriers is now available.
- *Review the Strategic Plan* with particular emphasis on a) strengthening its approach in certain areas such as support for vulnerable children, and responses to impacts on employees and system function, and b) giving new details on strategy in various areas to enable it to be a practical guide for decentralised action and implementation.
 - *All MBESC and MHETEC Divisions and Units* should refine or commence development of their HIV/AIDS strategic and operational plans.
 - *School, Cluster and Regional HIV/AIDS plans* should be developed or refined with adequate guidance and support.
- 9) ***Reinforce existing programmes and activities that are relevant to managing HIV/AIDS, and adapting them where necessary.*** Many current initiatives (e.g. management development, reinforcing skills of teachers, BEP, medical aid review) will enhance ability to respond to the challenge of HIV/AIDS and are critical to stabilize the overall education system to deal with HIV/AIDS and other stresses. However, HIV/AIDS introduces new vulnerabilities and needs in many of these areas that need to be factored into planning.
- 10) ***Improve information and monitoring of impacts and responses.*** HIV/AIDS prevention and impact management is hampered by lack of good information.
- Review and strengthen EMIS and other routine information and reporting systems to address HIV/AIDS issues and monitor implementation of HIV/AIDS programmes. Consider possibilities for more decentralised management information generation and use.
 - Use participatory approaches, qualitative information gathering and specific research projects in addition to routine statistics.

11) Develop strategy on resource allocation and mobilisation. In the short term, investment in dedicated budgets and capacity at schools, cluster, regional and Ministry level is required to mobilize, support and coordinate effective responses to HIV/AIDS. In the medium to longer term, it should be possible to incorporate most HIV/AIDS-related activities into core budgets and functions. Some costs particularly related to management of staff impacts, may become significant extra demands on budgets. However, they do not seem likely to be extremely large as a proportion of education expenditure and will climb gradually. They should thus be amenable to gradual re-prioritisation of programmes and expenditure within and across sectors.

- *The education sector should be bold in motivating for funding from donors and government for its HIV/AIDS initiatives.* An effective response by education is likely to have more effect on the epidemic and development outcomes than many competing initiatives.
- *Consider targeting of resources* to address the most vulnerable stakeholders and aspects of delivery. Targets may include rural and other disadvantaged communities and schools.
- *Focus on interventions and resources with multiplier effects* such as activities to disseminate examples of best practice and transport to facilitate coordination of resources.
- *Consider innovative approaches such as an incentive fund programme* to support planning and implementation of HIV/AIDS activities by individual regions, clusters or schools.

12) Strengthen HIV/AIDS programme capacity and structures. This is a priority to ensure an effective response to the epidemic. A basic structure is proposed for consideration (see below).

Provisional HIV/AIDS programme structure and functions at each level



Several issues should be considered in assessing the proposed structure:

- *Care must be taken in selecting staff.* No structure is likely to function effectively if its staff are not appropriately skilled and motivated. There is often a tendency to allocate HIV/AIDS responsibility to educators or managers who are “left over” after other functions are allocated.
- *The structure is expected to interface with a series of committees and focal persons* at all levels, including national ministry HIV/AIDS committees, RACE, cluster committees, and Counselling Support Groups. This is critical for the programme to obtain adequate support from other units, managers and staff. *Also consider more formal integration of key existing capacity and expertise with the structures.* An important example is SEU capacity.

- *Costs of the programme structure* should be considered in the light of it being a key investment to lay foundations of an efficient national response to a major, enduring problem. Capacity should also reflect the scale and complexity of its task - comparison of the size of the proposed structure with other programmes with similar or lesser mandates may be useful. Finally, the largest component of costs is likely to be due to dedicated guidance and counselling/ life skills capacity at school level, and this has already been proposed by the Presidential Commission. Nevertheless, phased implementation with initial focus on cluster level capacity may be necessary.

Initially, at the *Cluster level*, a full time skilled Guidance/HIV/AIDS Coordinator should be appointed to provide technical support coordination and direct services to schools until they have adequate in school-capacity.

At *school level*, the Head should specifically be held accountable for implementation of HIV/AIDS responses. As soon as possible, dedicated posts should be created for a Guidance and Counseling/ Life skills Co-coordinator, responsible for co-ordination, referral activities and aspects of service delivery and technical support within the school. The Head should have discretion in allocation of HIV/AIDS responsibilities, provided that outcomes are achieved, and should ensure that all functions are not left to the Guidance teacher. For smaller schools, or to relieve short-term resource constraints, part time posts and sharing of guidance posts may be appropriate.

Regional Offices require a full time HIV/AIDS Coordinator responsible for inter and intra agency coordination, and to facilitate and provide technical support when necessary. *Circuit offices and inspectors* should facilitate communication between the Regional Office and Clusters, and monitor progress, but with no extra capacity.

At *national level*, the HIV/AIDS Unit Director should report directly to the Permanent Secretary and be a member of the senior management team to enable communication, authority and input into policy and strategy formulation. At a minimum, full time positions should be created for three Technical Programme Leaders responsible for each of the workplace, prevention and life skills, and vulnerable children programmes, plus an education officer and secretary to support the Director and the technical programme leaders.

1. Introduction

1.1 Terms of Reference and Methodology

The MBESC and MHETEC have recognised that the HIV/AIDS epidemic will have an important impact on the education sector, its environment and its ability to continue to meet objectives of equity, effectiveness and efficiency. They also recognise that sound planning and implementation of responses to the epidemic can have a major influence on the size and type of impacts experienced. Informed planning by the sector requires an in-depth understanding of existing and projected HIV/AIDS impacts at all levels of the system, as well as the context of the sector, including current capacity, strengths and constraints, within which responses must be situated.

The terms of reference of this study defined its overall objective as supporting the Education sector to assess the impact of HIV/AIDS on its ability to meet its mandate. Specific issues to be examined include impacts of HIV/AIDS on:

1. Demand for education and any changes in the scale or type of needs to be met by the sector;
2. Ability to supply education, through impacts on employees and trainees;
3. Costs of education;
4. The process and quality of education;
5. The content and role of education
6. Planning and management in the education sector

The study was also tasked with a review current responses and asked to make recommendations to assist in refining strategy do address impacts

The study employed the following methodology:

- *Qualitative data collection* through group discussions and key informant interviews with managers, educators and learners in seven education regions, as well as with other stakeholders within the Ministries, and outside the education sector.
- *A school survey* of a nationally representative sample of 103 primary, 51 combined and 24 secondary schools, which collected data from school heads and guidance teachers in each school, and from a total of 734 Grade 10 learners in a sub-sample of secondary schools.
- *Secondary data collection*, including EMIS data, policies, legislation, and other documentation.
- *Demographic projections* to assess current and future levels of various HIV/AIDS impacts. These were produced using the most recently calibrated and customized version of Metropolitan Life/Doyle model, calibrated to the profile of the Namibian epidemic.

Findings of the school survey and region visits are expected to be quite indicative of current levels of HIV/AIDS impacts, responses and capacity. However, certain biases may not have been avoided. For example, respondents may have tended to give answers that represented their schools in the best possible light, and some respondents clearly had difficulty discussing certain sensitive issues. Data obtained from all sources has thus been integrated to inform and crosscheck interpretation.

Projections produced in this study can be expected to give a reasonable representation of the scale and types of HIV/AIDS impacts that need to be considered in education planning. However, projections involve many assumptions. Accuracy is limited by many factors, including limitations of the available data on the structure and trends in the underlying population, and the HIV/AIDS epidemic in Namibia. In this report point estimates of levels of impact are often presented. Planners should be aware that actual levels are likely to fall within a range around these estimates and at local level variation is likely to be large. Planning which uses the projections must therefore recognise the

limitations of projections and accommodate a number of possible scenarios, to limit the risk that any particular projection is not accurate.

1.2 Namibia Profile and Development Context

By mid-2001, Namibia's population stood at 1,800,000 people scattered across 318 259 square miles. 27 per cent are urbanised. The rural population is concentrated mainly in the North. Overall capacity to address any new challenges is limited by the small and relatively scattered population.

Since independence, concerted government policies to redress inherited inequities and promote human development have been implemented. There has been some important progress as reflected in indicators of education access in terms of schooling and adult literacy as well as in other indicators of health and access to water, sanitation and other key services (2000 DHS). For example, immunisation coverage of children aged 12 to 23 months has improved from 58 per cent in 1992 to 65 per cent in 2000. Access to and availability of reproductive health services also improved and 91 per cent of women receive antenatal care from either a doctor or a nurse and 78 per cent of women (68 per cent in 1992) have received assistance from a trained healthworker during their most recent delivery.

Prevailing social and economic conditions do however strongly influence Namibia's ability to achieve development and education sector goals, as well as its HIV/AIDS epidemic and feasible responses to the epidemic and its impacts.

Although Namibia is classified as a middle-income country, its Gini coefficient is the highest in the world, reflecting high levels of poverty, income inequality and un- or under-employment. Community and households resources available to support education therefore vary widely. Poverty is generally greater in the North, but many communities across the country face profound poverty even if they live in areas that are wealthier on average. The vulnerability of many subsistence communities is increased by drought. Particular groups such as the nomadic Ovahimba and the San have social, economic and cultural circumstances that make them disadvantaged in access to services. Potential to redress inequalities is constrained by limited overall economic growth rates, which have necessitated initiatives to limit public service expenditure.

Society is also in a state of transition. Many traditional social systems are disrupted particularly through high rates of urbanisation and temporary or permanent migration. Traditional support structures such as the extended family are increasingly disrupted, particularly for urban populations. Nevertheless, in many communities traditional values are still strong – a NACP official noted that in many communities, cultural influences are the strongest determinants of what is feasible and whether appropriate responses occur. Diversity or cultural traditions also has to be considered in responses. For example, some communities have matrilinear traditions while others are patrilinear, with potential implications for vulnerabilities of women, children and their households.

Certain communities in the North have faced additional challenges due to the war in Angola and local political upheaval. In some areas, this has profoundly disrupted social and economic life, as well as obstructed service delivery by government and NGOs at various times.

1.3 The Namibia education sector

Education has been identified as one of the principal means of Namibia's socio-economic development. The nation's commitment to education is clearly laid out in Namibia's Constitution, which makes education a right of all Namibians, and makes primary education compulsory. Namibia has also ratified the UN Convention on the Rights of a Child, and the African Charter on Human and People's Rights, which create obligations to ensure education and other support for children.

After independence, the country's 11 different education departments were unified. Seven education regions covering the 13 political regions have been defined, with circuits within them. In 2001, Namibia's education sector comprised of 1026 primary schools, 378 combined schools and 129 secondary schools. Government is the nation's largest single employer, and the Ministry of Basic Education Sports and Culture (MBESC) employs the largest number of people with over 20,000 employees, including over 18,000 teachers.

In addition to contributions by the public sector, substantial inputs are made by a variety of other players including households, communities, development agencies, NGOs, local authorities, churches and other responsible authorities. Communities and parents have started many of Namibia's schools and provided key infrastructure. International donors have also tended to play a major role in the education sector and often provide critical technical support and funding for innovations in the sector.

The MBESC has made remarkable strides since independence towards Education for All, and its goals of access, quality, equity, democracy and efficiency. The focus of the sector after independence has been particularly on improving access and participation, and building capacity throughout the sector.

- Primary school enrollment rates have reached 93% due to efforts to extend access.
- Educationally marginalised groups, including the San and Ovahimba, have been targeted with programmes to enhance their access.
- The number of primary and secondary schools, particularly in economically disadvantaged areas in the country, have increased. In the later 90's Namibia witnessed an increase in primary and secondary schools at an average of 1.6% per annum.
- The number of trained teachers and individuals in management positions has increased.
- Generally there is gender parity in enrollment levels with the exception of some regions i.e. Katima and Rundu, where secondary enrollment by girls is lower.
- The Ministry of Higher Education, Training and Employment Creation (MHETEC) has developed in-country capacity for tertiary and vocational education.

Key initiatives

Several key initiatives are of particular relevance to the HIV/AIDS response or vulnerability to impacts.

- Curriculum change has placed emphasis on learner centred approaches to teaching and continuous assessment.
- Management decentralization. This has mainly been limited to decentralization of certain functions to region level, with very little focus on decentralization of authority to school/ school board level. However, de facto decentralised decision making and problem solving has become more common under the cluster initiatives.
- School boards have been established in most communities as part of a programme to promote community involvement in education

A number of ongoing challenges face further progress in primary, secondary and higher education. These include:

- Reducing inherited inequities in access to education, particularly in secondary schooling,
- Increasing quality of education and its alignment with the economy's skills requirements.
- Infrastructure backlogs.

Progress in addressing these challenges tends to be constrained by several key factors.

- Limited managerial capacity and capabilities
- A relatively inexperienced and under-qualified teaching force. Many teachers still have difficulty in dealing confidently with issues such as discipline, learner centred approaches, specialist subjects,
- Logistical difficulties due to large distances and sparsely populated areas,

- Challenges of sustaining employee motivation and morale. Demoralisation was frequently attributed to factors such as difficulties in disciplining learners in the absence of corporal punishment and greater possibility of expelling learners, poor housing and pressure to transfer to areas which are currently under-served.
- Relatively bureaucratic organisational culture that limits innovation and initiative
- Financial resource constraints. Levels of education expenditure as a percentage of national income are already high when compared to other countries, and personnel account for around 80% of expenditure, limiting amounts available for other needs.

Obstacles tend to be greatest in the north and other areas of inherited disadvantage, where the majority of the population lives but the system is often already stretched simply to maintain basic aspects of education delivery for many communities.

1.4 Namibia's HIV/AIDS epidemic

The HIV/AIDS epidemic presents a major new challenge to Namibia. The 2000 HIV Sentinel Sero Survey reported HIV infection levels of 22.3% among pregnant women nationwide.

HIV infection levels vary widely between regions from around one in three women in Katima Mulilo and Windhoek, to 10% or less in sites such as Gobabis, Rehoboth and Opuwo. More remote and less densely populated areas seem to have lower levels of infection. To some extent, this may represent later development of the epidemic in various areas and communities, but trends suggest that risk factors and thus the shape of the epidemic curves vary between regions.

In all sites infection levels are high enough to represent a huge public health challenge. In addition, the national epidemic is still growing. In only a few sites are there signs that the epidemic may have reached a plateau, emphasising the important opportunities for prevention.

The AIDS epidemic lags behind the rise in HIV infection rates by 8-10 years. The relatively early stage of Namibia's AIDS epidemic creates important potential for pro-active responses so that the country is well prepared to manage the main burden of the epidemic when it arrives. Nevertheless, areas with more mature epidemics have already experienced a marked rise in the number of AIDS cases. Nationwide, AIDS deaths in the 15-49 year age group continue to increase and now account for around half of all deaths in hospitals.

HIV/AIDS is already massively increasing demands on social services such as health and welfare. At household, family and community level it is stretching coping capacity through its impact on income and costs, psychological effects of illness and deaths, and disruption of family structures. As AIDS deaths tend to occur mainly among young adults aged between 25 and 45, this has important implications for family and community function.

HIV/AIDS has cost implications for businesses and can seriously disrupt subsistence agricultural production. In the longer term, loss of young adults can be expected to have important implications for the skills base available to drive development.

The epidemic therefore profoundly challenges the resource requirements and capacity of key partners of the education system.

1.5 Responses to the epidemic

Namibia's response to the epidemic has benefited increasingly from commitment of political leadership at the highest and other levels. Political will is internationally recognised as a distinguishing feature of all successful and sustainable efforts to combat the epidemic.

The national response to HIV/AIDS is being led by the National AIDS Committee and National AIDS Coordinating Programme (NACOP) situated within Ministry of Health and Social Services (MOHSS). An important development is that initial concentration of responsibility and activities around HIV/AIDS in the health sector is now being replaced by promotion of a more multi-sectoral response. However, tendencies for many sectors to still consider HIV/AIDS responses to be the responsibility of MOHSS still remain. In addition, the response still needs to consolidate the process of expanding from the traditional focus of the response on prevention and some care and support issues, to managing impacts on society and function of various sectors. Various Sub-Committees of NACOP exist to cater for the specific needs of regions (RACOCs) and sectors (e.g. RACE's in education regions). Civil society groups and development partners play key roles in the national HIV/AIDS response at all levels.

There is increasing recognition of, and response to, the critical role of the education sector in prevention, support of infected and affected people, and in maintaining service delivery despite AIDS impacts. A critical factor in success of some RACOCs, particularly in implementing prevention activities, was noted to have been strong involvement and leadership from the education sector.

The sector's roles have begun to expand from its earlier role as a partner of NGOs and the MOHSS in HIV prevention activities. Both Ministries of Education developed a groundbreaking strategic and operational plan on HIV/AIDS in 2001. The strategy lays out processes to refine and implement strategy in particular areas that are consistent with, but extend beyond, objectives laid out for the sector in the National Strategic Plan on HIV/AIDS for 1999-2004. Though prevention is the primary focus of the plan, it also covers various aspects of care, support, and mitigation of impacts on both employees and learners.

Implementation of the strategic plan has been initiated. Although this has been slower than initially anticipated, support from management across the Ministry was noted to be increasing, and there has been important progress in several areas. These include integration of HIV/AIDS into the overall Ministry strategy and plans, insertion of HIV/AIDS as a standard item on some departmental and unit agendas, drafting of HIV/AIDS policy, and workshops to sensitise and train key managers such as inspectors on HIV/AIDS issues.

2. How does HIV/AIDS affect needs of learners and their education outcomes?

“Listening to Children and Young people and understanding what it means for them to be living in a world of AIDS, is the half way mark to solving the problem” Traditional Leader, Rundu

International and Namibian experience has shown that the HIV/AIDS epidemic has substantial influences on the needs of learners and demand for education. Importantly, it has also shown the potential for interventions to mitigate negative impacts. This study revealed many examples of determination, motivation and successful action at local and national level to mitigate the impacts of the epidemic.

2.1 What HIV prevention programmes are needed?

A detailed evaluation of current prevention programmes was beyond the scope of this project. However, knowledge, attitudes and systems created by HIV prevention programmes are a critical foundation for successful impact management. HIV prevention is also of central importance to avoid losing a large proportion of the education sector’s investment in young people. Examination of dynamics of the epidemic, interactions at school and region level and the school survey provides important information to inform the Ministries’ overall HIV/AIDS response.

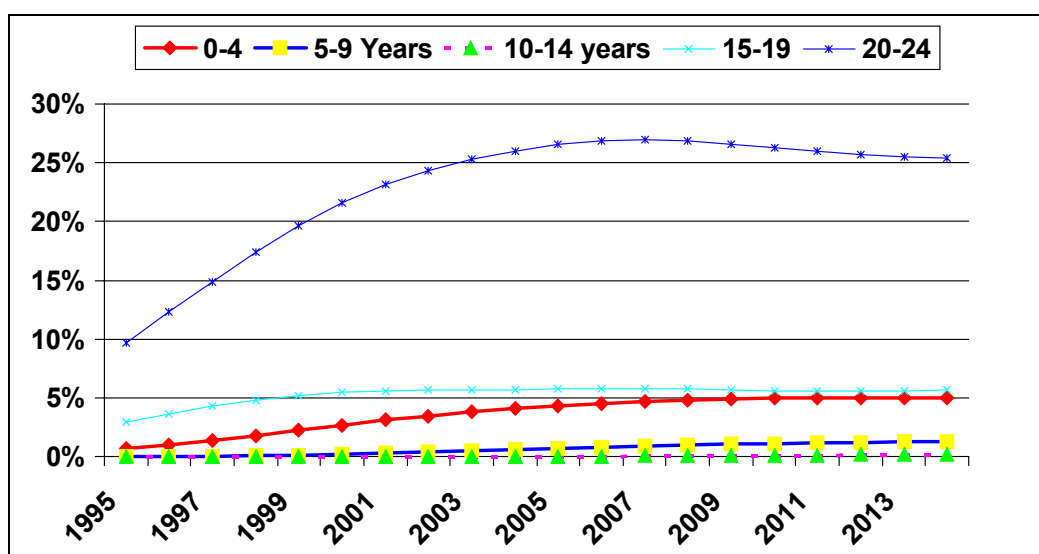
2.1.1 The Challenge

New infections among people aged 15-25 are the main driving factor in perpetuating the HIV/AIDS epidemic. Antenatal survey data indicates that rates of new HIV infection rates among young people in Namibia remain high. Among women aged 15-19 and 20-24, infection rates have stopped growing since 1996 but remain too high (12% and 20% respectively) to produce anything near an HIV/AIDS-free generation. The 2000 DHS also shows that knowledge about HIV/AIDS issues remains inadequate. Despite high levels of awareness of HIV/AIDS, less than one third of Namibians aged 15-19 knew all three main ways to prevent HIV infection in 2000.

Estimated HIV prevalence is close to zero among Namibians in the early teens, and then rises rapidly from the mid-teens to over 20% in individuals aged 20-24 (Figure 2.1). Higher levels of infection are experienced in many communities. In young men the rise in infection occurs later, as reflected in the older average age of people reported to have HIV/AIDS, but probably rise to a peak at similar, though lower, levels to the peak among women by the time men are in their 30s.

Importantly, the proportion of teenagers who are *not* infected is likely to be higher than assumed by many young people and this is an important message of hope. For all males and females combined, young people rates are estimated to be below one in 5% in the 15-19 age group before leaping to around one in four in the early 20s. These age profiles of HIV infection are well documented in community studies in Southern Africa and appear to be supported by Namibian blood donor data.

Figure 2.1 Projected HIV infection levels in age groups 0 – 24



Current levels of HIV infection fundamentally challenge the mission of the Education sector. Unless prevention is more effective, over one quarter of learners will become infected during or soon after their education. Most of these will die of AIDS before they reach the age of 40. This is not only a social and human disaster, but is a loss of investment in education that far exceeds most other system inefficiencies. More than any other sector, education has opportunities to influence levels of HIV infection among young people, through its direct contact with them in institutions and non-formal education.

2.1.2 Current Responses

In response to the need for prevention education, MBESC has infused HIV/AIDS education into its curriculum for science subjects and has included HIV/AIDS education into life skills training by Guidance and Counselling teachers. However, “life skills” training as applied in Namibian schools seems not to have fully adapted its content and focus to ensure that it gives young people the skills required to empower them to protect themselves against HIV/AIDS and cope with its consequences.

Additionally, the MBESC has collaborated with UNICEF in the internationally recognised extracurricular “My Future My Choice” (MFMC) programme that targets 15 to 18 years olds in and out of school, though younger learners have also benefited from it. These actions have been complemented by initiatives of other development partners, NGOs, communities, and pre-service programmes in teacher training colleges.

Coverage of HIV/AIDS prevention programmes in Namibia is quite extensive¹². However, it is clear that many schools have not been reached in any effective way. The school survey found that 69% of Grade 10 learners incorrectly answered at least one of four questions on basic facts about HIV/AIDS¹³. Alarming, learners in the North had inadequate basic knowledge (74%) compared

¹² 86% of heads said that learners had received HIV education at the school, and this was higher for secondary and combined schools than primary schools (92% and 95% respectively compared to 81% in primary schools).

¹³ The four questions traditionally used to assess basic knowledge about HIV/AIDS, which were asked are: Can people reduce their chances of getting the AIDS virus by having sex with just one partner who has no other partners?; Can a person get the AIDS virus from mosquito bites?; Can a person get the AIDS virus by sharing food with a person who has AIDS? Is it possible for a healthy looking person to have the AIDS virus?

with learners in the South and Central areas (54%). Girls were slightly more likely than boys to give incorrect answers. There were no marked differences in basic knowledge by age. Even in participating schools, cornerstone programmes like MFMC are voluntary and extracurricular, so they do not reach all learners. Many schools do not sustain programmes after initial activities. Large numbers of learners seem to know very little about the programme content apart from the fact that it distributes condoms. Particularly in rural areas, programmes are hampered by lack of equipped teachers in Guidance and Counselling and Science, or other systems to support peer and other HIV education. Generally HIV/AIDS activities are not prioritised in reality even if they are timetabled.

Even in schools with stronger programmes, there is skepticism among staff and learners about whether risk behaviour of young people is actually changing. Various reasons were cited for this including insufficient knowledge and skills to deal with the complex technical and psychosocial issues around sex, lack of availability of condoms and peer pressure.¹⁴ A 2001 survey conducted by the Institute of Policy Research in Namibia revealed important facts about high-risk¹⁵ sexual behaviour among Namibian youth. Important findings worth mentioning were that:

- Young Namibians become sexually active at an early age
- High-risk activity amongst the participants occurred more frequently around the ages of 16 –18.
- There is a strong correlation between the age of first sexual intercourse and high risk sexual behaviour i.e. the younger people start having sex the more risky their sexual behaviour tends to be.
- There is a stronger correlation between having multiple sexual partners and the age of first encounter, than between the age of first sexual encounter and unprotected intercourse.
- Being single is no indicator of one's risk taking behaviour
- It appears that more males than females engage in high risk sex engage more frequently in high risk behaviour than females
- Few young Namibians are using any form of protection during intercourse
- Well-educated individuals with greater access to information are basically at the same level of risk as less educated individuals with poorer access to information. Though urban dwellers have more access to media, this does not appear to impact on their behaviour.

Regional Visits ascertained that factors that negatively influence decision-making on sexual behaviour among youth include:

- poverty and unemployment
- peer pressure and community norms encouraging high risk sexual practices
- cultural beliefs and activities which predispose to high risk sexual relationships
- church beliefs which forbid talking about AIDS
- ignorance and lack of AIDS education in the home
- no parental or guardian control or guidance
- abuse of drugs and alcohol
- media exposure to sexual messages
- conflicting messages about prevention from various support groups, eg. on the use of condoms and safer sex vs abstinence

Many broader factors which create HIV infection risk were noted that are not adequately addressed by current school and extracurricular programmes. These included poor role modeling by teachers, families and communities; breakdown of certain protective cultural norms and persistence of others

¹⁴ 48% of learners said condoms were not available or that they did not know whether condoms were available.

¹⁵ High risk for purposes of the survey defined to mean unprotected sexual intercourse and having multiple sexual partners.

such as the subservient position of girls and women to men; poverty and unemployment; widespread inter-generational sex and relationships for material and other rewards; and sexual abuse and harassment in and outside schools.¹⁶ Other environmental factors such as alcohol use and bars, proximity to security forces and development projects were noted in several regions. Children living in child-headed households or without adequate adult supervision were noted to be at particular risk. These factors need to be considered in the adoption of more holistic and long-term approaches.

“Some principals have put condoms in their offices but students are required to bring letters from their parents before being able to use them. They therefore opt to have unprotected sex”

RACE Member - Ondangwa West

2.1.3 Recommendations – HIV Prevention

Current HIV/AIDS prevention initiatives have laid key foundations for success. However, it is clear that they need to be strengthened considerably if they are to achieve the goal of an AIDS-free generation. A bolder, more holistic and long-term approach is needed. HIV prevention will be relevant for many years – an adequately effective HIV vaccine seems unlikely to be available for 5-8 years at least, and may never be found. Prevention initiatives have to be seen as “core business” and an urgent priority across all components of the sector. Importantly, effective HIV prevention will help to address pre-existing problems facing education, in particular pregnancy among learners. The following recommendations are made.

1) **Mainstream HIV/AIDS prevention in education**

- *Develop a more effective strategy to integrate HIV/AIDS in school, teacher and learner assessments and timetables.* Most aspects of HIV/AIDS education are not examinable or assessed, so it is not prioritised. Studies have shown that school based educational programmes led by teachers have longer lasting effects in preventing risky behaviour (Fisher 2002).
- *Strengthen training and guidelines for school, hostel, circuit and Regional Managers (particularly RACE members).* They must see HIV/AIDS prevention as a core education responsibility, understand requirements for effective prevention and be able to provide leadership, support and supervision.
- *Consolidate integration of extracurricular programmes (e.g. MFMC) into school routines.* These programmes will be a key component of the response for the foreseeable future. Resistance and lack of commitment by managers and teachers must be overcome.
- *Consider extending the length of the school day.* This could facilitate effective timetabling of HIV/AIDS activities and reduce unsupervised time, which expose learners to risk. Extending the school day is already being considered by the MBESC independent of HIV/AIDS factors.

2) **Ensure strong programmes in primary schools and Early Childhood Development.** It is widely accepted that reaching children with HIV/AIDS-related messages before they become sexually active is both essential and feasible for behaviour change.

3) **Strengthen HIV/AIDS life-skills teaching capacity and capabilities**

- *Ensure that dedicated posts are available to provide capacity in all schools* (with sharing of posts between schools where necessary) to perform life skills and other pastoral and guidance functions. Consider using resources such as secondary graduates, retired teachers, non-

¹⁶ In many schools, learners and staff indicated disturbing levels of abuse and harassment by teachers and peers. Around 16% of learners reported that they had been forced or pressurised to have sexual relationships and 17% of learners reported that they had been hit or slapped on purpose by a partner.

teaching staff and other volunteers to overcome capacity and skills limitations in the short and longer term.

- *Improve selection of life-skills teachers.* This tends to be based on who is “left over” after other roles are allocated, rather than aptitude or need for continuity, coherent career-pathing and programme development.
- *Improve ability to use participatory approaches and materials.* Stronger training and support systems are required to enable teachers to deal confidently with the diverse and evolving knowledge needs and risk situations confronting learners. It is important for teachers to listen and learn as well.
- *Strengthen peer education approaches. These seem to be powerful and successful.* However, particular models such as MFMC require further evaluation to ensure greater effectiveness. Structured, ongoing support of peer education groups by designated teachers must be seen as a critical contribution by schools and other education institutions. Studies have shown that peer intervention produces a substantial decrease in high-risk behaviour (Fisher 2002).
- *Strengthen approaches and capacity for training and support.* Cascade approaches to training have been disappointing, and strengthened in- and pre-service training is critical.
 - a. Teachers must become more than information disseminators. They should be confident facilitators of open discussion and problem solving within and outside schools.
 - b. Reinforce theoretical training with practical training to increase confidence in flexible approaches, and expose teachers to relevant social dynamics in the communities.

4) ***Prioritise life skills programmes aimed at staff as a way to reinforce learner prevention.*** HIV/AIDS raises unresolved personal issues and anxieties for many staff, making them less effective life skills teachers and role models.

5) ***Strengthen curriculum and content.*** Materials and the curriculum are widely considered to be repetitive, unchallenging and unable to respond to needs for more detailed, explicit information and skills. Greater variety and depth of materials is needed. Key issues that need greater emphasis include:

- *Reinforcing reorientation of previous life skills programmes* to fully internalize needs for HIV/AIDS related life skills.
- *Resolving unnecessary conflict and confusion between abstinence and safer-sex messages.*
- *Reinforce positive messages.* Many staff and learners express despair and feelings of the inevitability of HIV infection, and many learners who are probably not infected assume that they are. At school level and in many materials, HIV/AIDS prevention is often characterized by “scare tactics”, and learners get little input on positive living with HIV/AIDS. Such approaches have been shown to have limited effectiveness, undermine counselling and support particularly when the same teachers are responsible for prevention and support, and leaves affected and infected learners feeling disempowered.
- *Life skills and behaviour change rather than factual knowledge.* Factual knowledge is required, but programmes must resist educator tendencies to gravitate to technical issues and neglect building skills to confront issues such as socio-economic and peer pressure, gender relations and desire for status.
- *Care and support, and development of coping skills.* Many learners already face care and support issues in their own families. Active student involvement in care and support can be very empowering.
- *Sensitivity to language and cultural variations.* Language barriers and failure to address cultural issues were often identified as an obstacle with current materials. Examples of culture as an underutilized resource to reinforce HIV prevention were also frequently cited.
- *Involvement of adolescents in material development and revision.* Adolescents’ contributions are critical to ensure relevance and responsiveness of materials and approaches.
- *Education on human and children’s rights and obligations.* Reinforce knowledge of the rights of children to empower learners and deter abusers.

- *Strengthen infusion of HIV/AIDS into other subjects.* However, international experience emphasizes that this can reinforce but not replace life skills programmes.
- 6) ***Actively address sensitive issues.*** Cultural, parental and staff sensitivities tend to be avoided rather than addressed, and seem to be used as an excuse for inaction.
 - *Create empowering policy and staff education on safer sex education and condom distribution.* Current confusion on policy around access to condoms in schools is a major problem in the context of widespread sexual activity of learners and inaccessibility of condoms from other sources. Work is needed to dispel myths that condom distribution necessarily encourages sexual activity among youth. Numerous studies internationally have found that safer sex education programmes and condom access do not encourage teens to have more sex or start having sex earlier. There is also little or no evidence that abstinence-only programmes are effective (see eg Fisher 2002)
 - *Ensure that Circuit, Cluster and school leadership have the relevant knowledge, skills and policy support* to engage communities to dispel myths and negotiate ways to protect children.
 - 7) ***Involve learners in decision making*** through representative councils and other mechanisms
 - 8) ***Ensure safe and supportive institutional environments.*** At a minimum, education sector intervention is necessary to ensure safety of learners in environments under direct control of the system. Many schools are clearly sites of harassment and abuse by teachers and peers, and teachers are often poor role models. Hostels, community boarding and school events expose many learners to HIV risk.
 - *Refine a policy on zero tolerance* of sexual harassment and disseminate it to all staff and learners.
 - *Streamline reporting, management and discipline systems* around harassment and abuse. Provide practical information to all children and teachers on how to access these systems.
 - *Assess safety of hostels, community boarding and school events* and develop feasible responses to reduce risk. Consider employing full time hostel managers to enhance supervision.
 - 9) ***Address external and community environments more effectively.*** Community and family environments and norms often undermine rather than reinforce the HIV/AIDS messages promoted in schools. Particular challenges include intergenerational sex with older partners.
 - *Reinforce engagement of parents and communities*, and enhance skills and mandates of educators to deal with cultural or other obstacles to HIV/AIDS prevention. Work with communities to build on traditional systems such as “Shinyanga” to change group norms.¹⁷
 - *Encourage the use of schools for community networking between parents, elders, NGO’s etc.*
 - *Ensure that schools actively address high-risk environments*, e.g. trucking areas, kuka shops and bars, local construction projects and barracks.
 - *Develop national and local strategies to actively address risk of learners with absent parents.* These include those boarding in the community and living in child-headed households.
 - 10) ***Develop programmes that cater specifically for learners with special needs.*** Learners with special needs lack accessible information and could be predisposed to abuse and other high-risk situations.
 - 11) ***Develop effective monitoring and evaluation of implementation.*** Improved, ongoing monitoring and evaluation will be critical to enhance coverage and effectiveness of HIV/AIDS programmes.

¹⁷ The Shinyanga system provides a platform where parents and community members can share information with adolescents through folklore, tales, etc.

- *Consider importance of need for learner and community involvement* in monitoring and evaluation, to increase ownership and provide qualitative data needed to understand successes and obstacles.
- *Include routine reporting* on resources and implementation in EMIS and other routine systems.
- *Enhance dissemination of information* to stakeholders at all levels.

12) Strengthen coordination and inputs of other sectors and programmes. Other sectors and multiple programmes will be critical components of effective education responses for the foreseeable future.

- *Improve coordination between prevention programmes.* Even at national level, major programmes are coordinated inadequately therefore there can be no maximization of synergy across programmes and Directorates.
- *Ensure more efficient coordination and use of available resources of key role players at all levels.*
 - Engage *health services* more effectively to ensure youth friendly Reproductive Health Services, condom access and technical support.
 - *Strengthen NGO inputs* through coordination to ensure systematic cooperation and ensuring that policies and systems are supportive of using NGOs for training and support rather than direct service provision.
 - Reinforce *cross-sectoral capacity development and support.* Build on some regions experience of coordination with health services, social workers and NGOs for training and supporting teachers.
 - *Investigate potential synergies with voluntary counseling and testing (VCT) programmes.*
- *Reduce unnecessarily bureaucratic barriers* to involvement of external parties in school initiatives.¹⁸

"The doors of education are too narrow. We should not be content with just preaching about condoms. Focus must be given to educating young ones about their sexuality, that is, dealing with emotions and learning to say no!"

Church leader, Ondangwa East

2.2 Numbers of children requiring education

The HIV/AIDS epidemic is expected to slow growth in the number of children of school going age in Namibia for several reasons. These include death of women in childbearing ages, suppressed fertility among HIV-infected women and death, usually before the age of five, of children who are infected with HIV around the time of birth or through breastfeeding. In the absence of AIDS, it would be expected that the number of children in all age groups would have increased (Figure 2.3).

Projections of HIV/AIDS impacts on the number of young Namibians indicate several important issues for planning (Figure 2.2):

- *Lower growth rates in the total number of people in school-going ages.* In the absence of the epidemic the number of people in the 5-19 age group would have grown from around 593,000 in 1995 to around 815,000 by 2010. Although the total number of children and youth is still expected to increase, HIV/AIDS is projected to lead to a population aged 5-19 of only around 752,000 by 2010.

¹⁸ External party involvement in schools is often hindered by inefficient systems requiring permission from Head or Regional Offices. Access control/coordination systems must avoid creating negative overall effects on urgent needs for greater learner access to programmes.

- *Earlier impacts on the size of the population in younger age groups.* Projections suggest that HIV/AIDS is already likely to have resulted in a leveling in the absolute numbers of children in the 0-4 year old age band. The 5-9 year age group, which includes most children entering school, is likely to start declining around now, and will be around 14% smaller than expected in the absence of AIDS by 2010. A plateau in the numbers of children aged 10-14 and 15-19 year age groups is expected to occur around 2009 and around 2015 respectively, followed by declines.
- *Robustness of projections to changes in many key HIV/AIDS-related assumptions.* The general trends that are projected seem relatively insensitive to changing key assumptions such as fertility of HIV infected women and rates of transmission of HIV from mother to child.

Figure 2.2 Projected number of children and young people 2000-2015 (AIDS scenario)

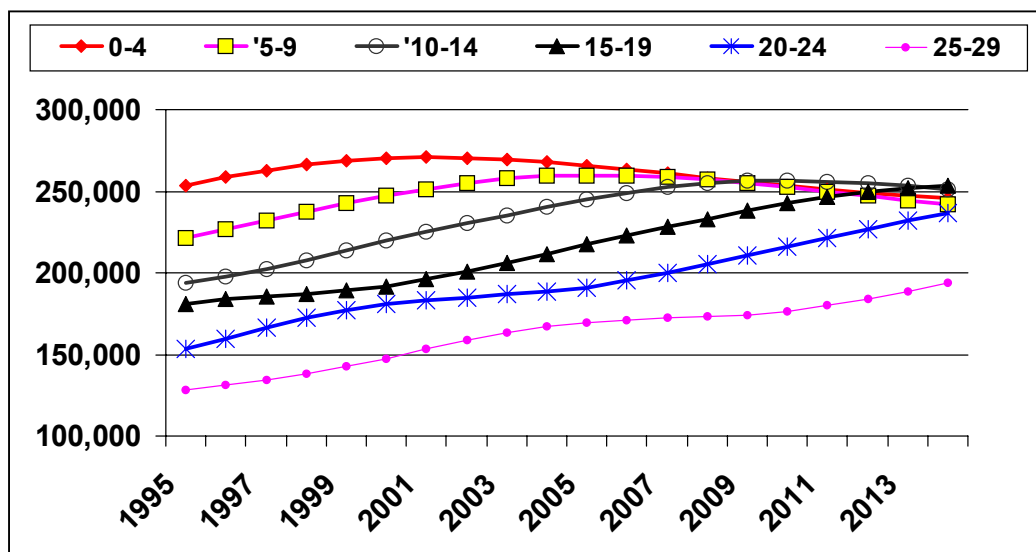
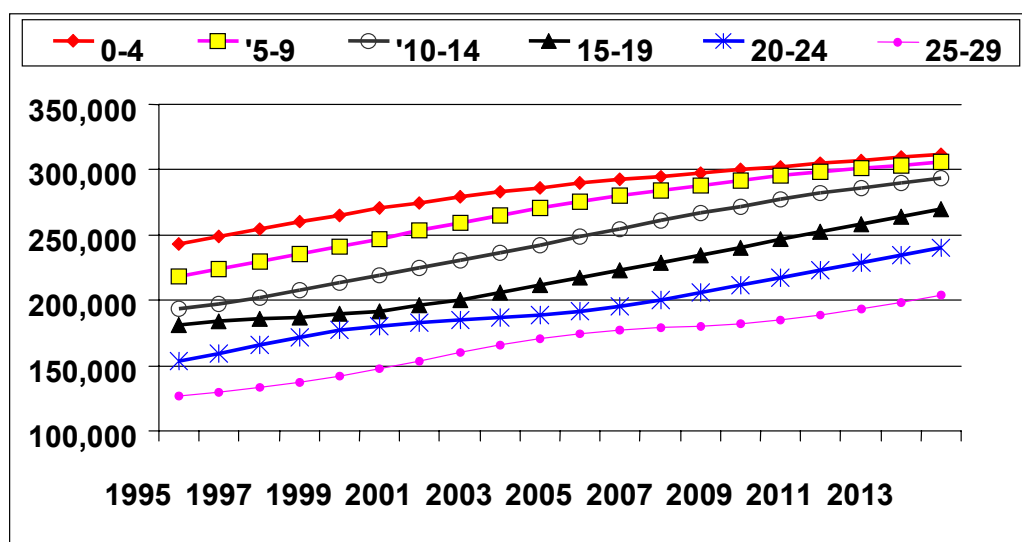


Figure 2.3 Projected number of children and young people 2000-2015 (No AIDS scenario)



EMIS data for the Katima Mulilo region, indicates that primary school enrollment has been declining over the late 1990's. Projections suggest that HIV/AIDS impacts on numbers of children are unlikely to explain all of this as a decline in 5-9 year old learner numbers is expected to only occur from 2001. Declining enrollment has also occurred in older age groups which would not yet be affected by

declining fertility due to AIDS. Other factors e.g. migration or general socio-economic conditions are thus likely to be dominant factors, although HIV/AIDS impacts on potential learner numbers and on households may be contributing to the trends.

The projected impacts of HIV/AIDS on learner numbers have important implications for planners. Education sector infrastructure and human resource planning has to anticipate changes in the expected number and age profile of learners.

However, there are important uncertainties in projections including the assumed underlying population fertility trends as well as various uncertainties around HIV/AIDS parameters (see further discussion of methodology and limitations in Annex C). Particularly at local and even regional level, changes in student numbers are difficult to predict given available data. Analysis of the 2001 Census and close monitoring will be required to assess the accuracy of these projections.

Planning will inherently have to aim for flexibility to deal with uncertainty and adopt “least risk” assumptions and scenarios. In general, it is likely that it will be less risky to assume that learner numbers will be somewhat higher than indicated in projections.

2.3 Orphans and Other Affected Children

The greatest impact of the HIV epidemic on learners and students while they are in Namibia’s schools and other institutions will be through impacts on their families and households. Orphans will be the most obvious affected group, but other children may be affected when their households take in orphans or provide other support to family or community members. Traditionally, orphans have been absorbed within the extended family but this is becoming more difficult because of the large number of young adults dying. The burden of care and support is falling on the very young and the very old.

Several strategies have been introduced to strengthen care and support. A number of communities, NGO’s and other sectors are already responding to the needs of orphans and other vulnerable children. They can provide examples of best practice and opportunities to build on existing foundations.

2.3.1 Number of orphans requiring education

Projections indicate that the total number of children in Namibia who have lost at least their mother to AIDS, will rise five-fold from 2001 levels of around 24 000 to around 132 000 in 2010 (Fig. 2.4).¹⁹ Orphans will be concentrated in school-going ages. For 2001, under 5% of children of all ages are estimated to have lost their mothers to AIDS. However, rates among 5-9 and 10-14 year olds are expected to rise to almost one-in-six and one-in-four respectively by the end of the decade. Levels could rise to one-in-three for 10-14 year olds thereafter (Fig 2.5). Some regions, schools and classrooms can be expected to have much higher than average rates of orphanhood.

¹⁹ In projections, orphans are defined as children who have lost their mother or both parents to HIV/AIDS.

Figure 2.4 Projected number of orphans in Namibia

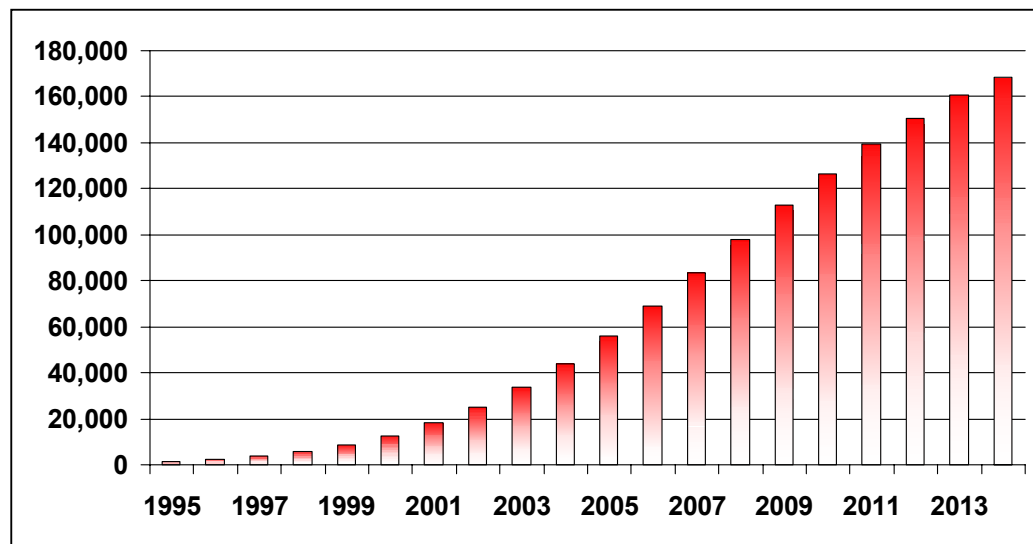
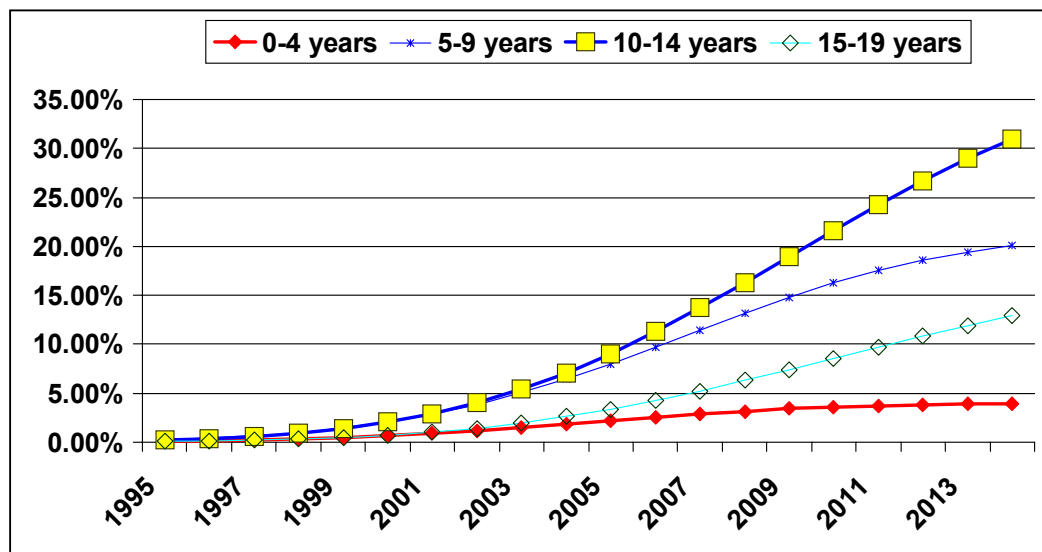


Figure 2.5 Projected percentage of children orphaned by AIDS by age group in Namibia*



2.3.2 Empirical evidence of orphanhood amongst Namibian learners

Empirical data on the number of orphans in Namibia is limited. No systematic orphan enumeration has been conducted. Among Grade 10 learners in the school survey, around 13% of children in the sample reported that they were maternal orphans²⁰, and 8.5% were double orphans. 75% of them knew of orphans in their community. Of the two-thirds of teachers who could give estimates of maternal orphan numbers among learners, one half thought that rates were under 5%. A third estimated levels of 5-10% and one in ten thought they were 10-25% and 9% felt they were above

²⁰ Prevalence of maternal orphanhood increased by age, with those 18 years and over having the highest prevalence, and those 14 years old having the lowest

25%. Estimates were again generally higher in the north,²¹ Amongst the Grade 10 learners surveyed, those from schools in the North were more likely to report that their mother had died than children in the South and Central regions; this association was statistically significant (OR=3.16; 95% CI 1.52; 7.35). Table 2.1 below presents maternal orphanhood reported by Grade 10 learners by region. The most severely impacted regions were Katima and Ondangwa West.

Table 2.1: Proportion of Grade 10 learners who were maternal orphans by region

Region	Is your biological mother alive?		
	Yes %(n)	No	Unsure
Katima	83% (39)	17 % (8)	0% (0)
Keetmanshoop	95% (54)	5% (3)	0% (0)
Khorixas	96% (42)	5% (2)	0% (0)
Ondangwa East	83% (105)	14% (17)	3% (4)
Ondangwa West	77% (157)	18% (37)	4% (9)
Rundu	90% (77)	9% (8)	1% (1)
Windhoek.	95% (52)	4% (2)	4% (2)
Unclassified (Head office)	82% (9)	18% (2)	0% (0)

An important finding is that there is substantial variation around average levels of orphanhood, with very high levels in some schools. The proportion of maternal and double orphans in Grade 10 ranged up to 50% and 30% respectively in schools, and median rates were markedly higher in the north (14.2% and 10%) than in southern and central areas (6.7% and 0%).

2.3.3 Impacts of Orphanhood on Schooling

Orphans' schooling can be affected through economic stresses on their households, psychological impacts that are a result of changes in family structure and functions that involve new responsibilities to care for the sick, the elderly or siblings, as well as loss of parental guidance and interest in children's education.

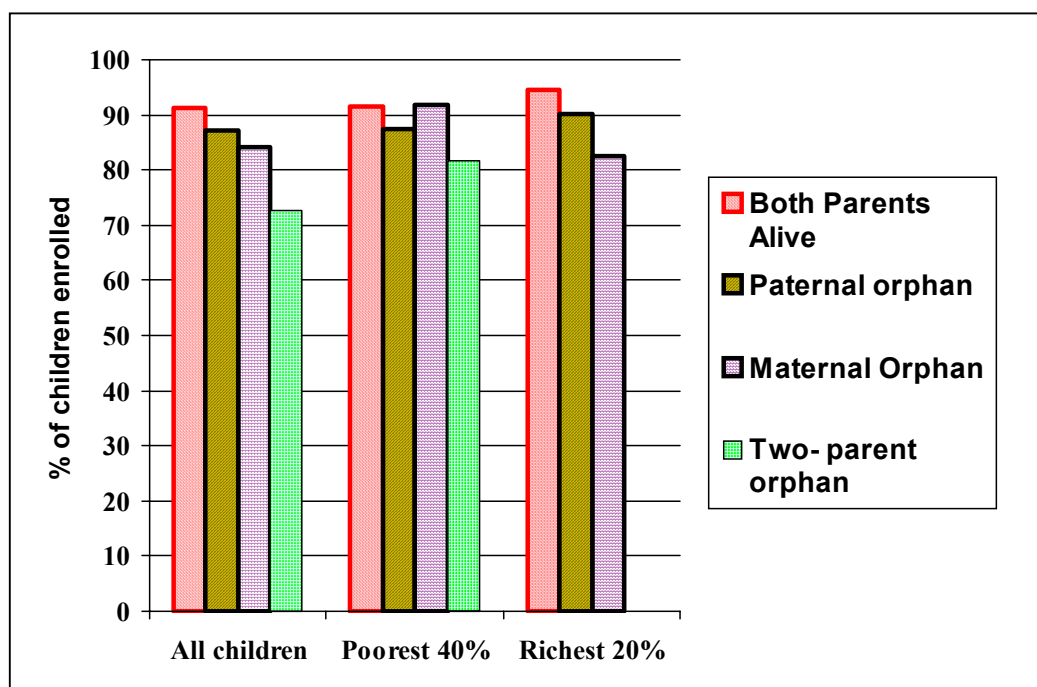
Dropout or failure to enroll is the grossest manifestation of impacts of orphanhood on education. Evidence suggests that orphans tend to have lower enrollment rates than children with both parents alive and their disadvantage can be substantial (see example from Kenya in Figure 2.6). A number of studies suggest that enrollment rates of orphans can be around 30% lower than among non-orphans (UNAIDS 2000). Uganda studies have indicated that orphaned children had around a 50% lower enrollment rate than non-orphans, and that enrolled orphans had more erratic attendance (UNAIDS 2000; Konde-Lule et al. 1996; Horizons Project 2000). In Kagera, Tanzania the average number of hours of school attendance was lower among children in households affected by an adult death (Lundberg and Over, 2000).

However, other studies suggest that orphans do not always have substantially lower enrollment rates (Ainsworth M Filmer D 2002). Impacts seem to vary widely, depending on social, economic and

²¹ These levels are generally higher than would be expected from projections. This may indicate sampling or other biases in the school survey, inappropriate time lags or underestimations in projections or children orphaned during the liberation war. However, they suggest that orphanhood is already a significant issue in schools that warrants a response, particularly in view of the expected large increase in orphan numbers.

cultural circumstances. There are strong indications that household income may be a stronger predictor of non-enrollment than orphan status per se.

Figure 2.6: Enrollment Rates by Orphanhood Status, Kenya 1998



Source: Ainsworth M Filmer D (2002)

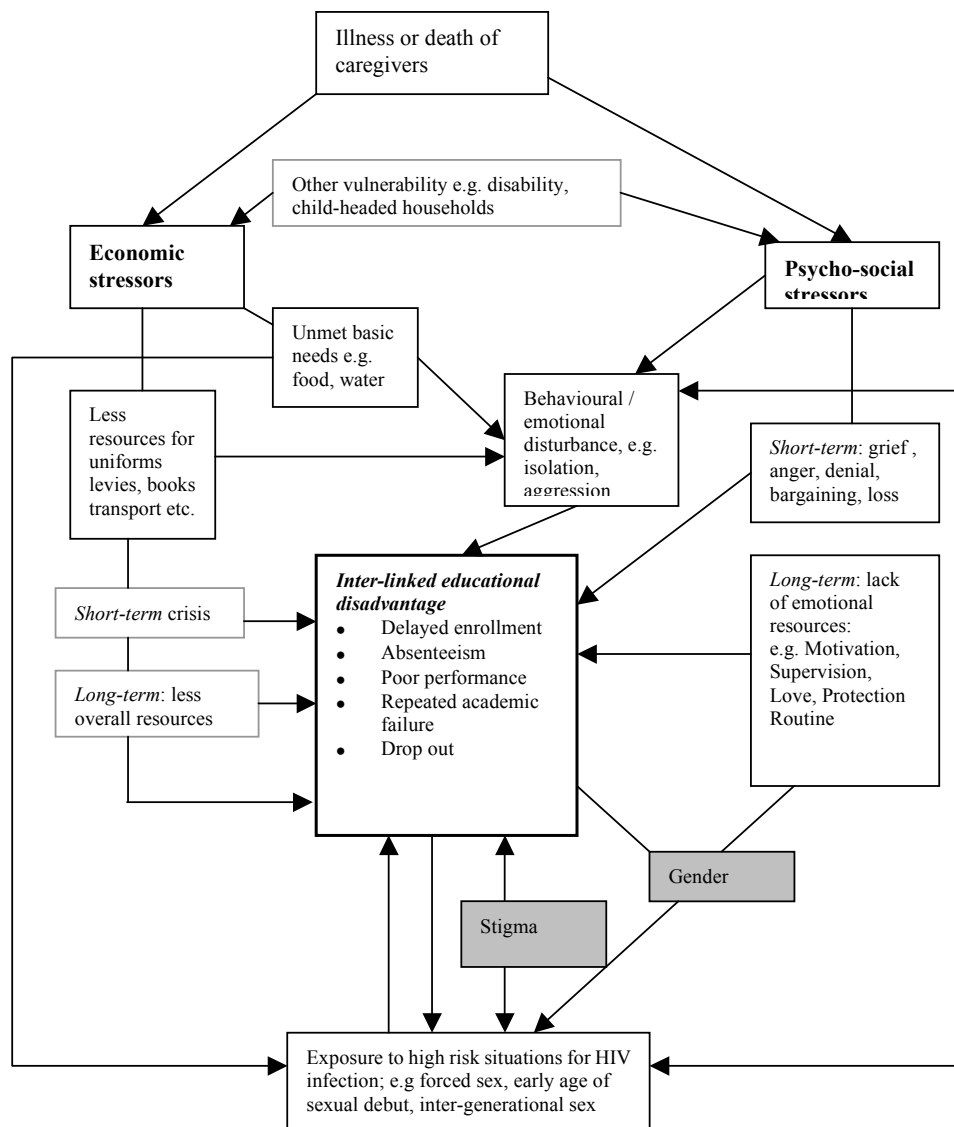
Other findings include:

- *Lack of material resources to meet basic needs* is a common reason that children drop out of school, or perform poorly. In Kagera, rural Tanzania, households affected by adult deaths took certain children out of school as they could not afford to send them and because they were needed for household chores (Over and Ainsworth, 1996). In a Zimbabwean study, 13% of children in households after an adult female death were unable to attend school and absence lasted for more than six months in 75 percent of these children due to financial constraints (Mutangadura, 2000).
- *Effects on schooling may differ with age and level of schooling.* On Zimbabwean commercial farms, 48% of primary school orphans dropped out of school due to parents' illness or after their death, and 100% of secondary school orphans had dropped out. (UNAIDS 2000). Delayed primary school enrollment of Kagera maternal orphans (but not paternal orphans) was found in 80% of cases but enrollment was maintained for children aged 11-14 (Ainsworth *et al.* 2000).
- *Gender dynamics* influence the way in which the epidemic impacts on children's education. Studies have shown that girls tend to be at higher risk of dropping out than boys, girls are normally charged with the responsibility of taking care of sick parents or relatives, and girl orphans have different needs from those of boy orphans. There is evidence that household food distribution usually disadvantages girl children and women especially in heavily patriarchal societies where there is boy child preference (Mposhere 2001). In Uganda, in various studies, a gender differential was also evident for school attendance whereby school attendance dropped for 47% of male and 67% of female orphans (UNAIDS, 2000; Konde-Lule *et al.*, 1996; Horizons Project, 2000). Recent analyses of data from other countries suggest that impacts of orphanhood on enrollment of girls does not appear proportionately greater than among boy orphans in many countries, and tends to mirror general gender inequities in enrollment (Ainsworth, Filmer 2002).
- *Impacts often occur before children are orphaned* due to effects of illness on their households.

- *The period surrounding parental death* seems likely to indicate a critical a critical point of heightened vulnerability. A Kenyan study found that 52% of AIDS-orphans were not in school compared to 2 percent of non-orphans. Among the orphans, 56% of girls and 47% of boys dropped out of school within twelve months after death of a parent. (Elmore-Meegan, 1999).

Other impacts of orphanhood on education outcomes have frequently been noted, but understanding of them is still at an early stage. Many reports indicate that orphanhood, particularly due to a stigmatized disease such as AIDS, can substantially affect performance, completion rates and general development of learners. Commentators have noted that effects of orphanhood on children may only manifest after many years, with important social consequences because of the scale of orphanhood in many communities (Khin-Sandi Lwin 2001). Figure 2.7 illustrates some of the mechanisms by which the education and well-being of OVC's may be threatened before and after illness and death of a parent or care-giver.

Figure 2.7: Diagrammatic representation of mechanisms of educational disadvantage amongst OVC's



Factors that influence levels of psychological trauma experienced by a child include:

- Age and sex of child
- Level of independence
- Innate resilience
- Availability of close alternate sources of emotional care
- A difference in risk factors in different areas

2.3.4 Empirical evidence of children's vulnerability from regional visits and school survey²²

In Namibia, there is limited data on orphan *drop out and attendance rates*. However, there are strong indications from qualitative work and the school survey that a significant number of orphans are affected by drop out. 29% of the learner sample reported knowing children who had dropped out for over a month after a parental death and 26% knew of permanent drop outs after parental death. Among teachers, 11% noted parental death to be an important reason for children dropping out of school. Anecdotal reports of good learners who had dropped out after parental death were common.

"We are having to apply for more funds from the Orphan Emergency Fund to assist children in the community who are brought to us by concerned community members. Most of these children have had to leave school because of a not having enough money to pay fees. We must come up with a solution - assistance from the fund is only temporary."

Social Worker, Ondangwa West

In the school survey, 46% of surveyed teachers said that *learner performance* drastically declines if a child is orphaned, and another 41% said that performance drops somewhat. Informants provided many reports of children who were clearly severely stressed by loss of parents despite still being enrolled.

Girls may be at higher risk of adverse outcomes. The school survey, EMIS data analysis and qualitative data provided no clear indications of whether boys or girls were more heavily affected by orphanhood. However, focus groups often felt that greater household burdens, pressures for early marriage and/or parenthood, and risk of abuse, sex work or other high risk sex among female orphans make them vulnerable. Pregnancy has been identified as a major cause of drop out in Namibia, suggesting that these types of risks are significant considerations. Drop out rates among females are relatively high in secondary school grades, while higher drop out rates among primary school boys also suggest a gender related vulnerability (see Annex G).

Vulnerability of orphans at different ages or stages of schooling may differ. There is relatively little information on these aspects of impacts specific to orphans. However, data on drop out rates and causes (see Annex G), and other sources suggest that norms around schooling, household roles as producers and carers, and psychological vulnerabilities differ according to age. This observation and results indicated below suggest that orphanhood may affect the education of children of different ages differently.

Important underlying problems that create obstacles to education of orphans and other vulnerable children that emerge from Namibian and other data include the following:

- *Material needs.* These include temporary or longer-term inability to pay for various school-related needs including uniforms, levies, fees and materials. Lack of resources to meet basic needs such as food and shelter is also a common reason that children drop out of school or perform poorly.
 - Inability to pay fees was cited as an important reason for drop out by 23% of secondary and 8% of primary teachers.
 - In a number of areas, tendencies for orphans and vulnerable children to prioritise finding work to address basic needs was noted, particularly for children in households headed by children or grandparents. Need to earn money (35%) and work at home (23%) were commonly cited for secondary boys by teachers, with generally lower levels for girls.

²² This study could not rigorously quantify impacts of orphanhood on education outcomes. This would require a large study of cohorts of orphans and/or household survey data to avoid risk of major biases. School-based samples of children may under-represent children who are disadvantaged by parental death and thus don't attend school, and there may be systematic under-estimation of impacts because school staff and students may not be sensitized to orphans and vulnerable children issues, or aware of them because of non-disclosure.

- Hunger was noted to be a common problem that led to drop out or poor performance in many schools. Hunger was cited as an important reason for drop out by around 10% of surveyed teachers. Among Grade 10 learners, 32% reported hunger among children in their households. Rates were lower (27%) among children who lived with one or both parents during the term than among those who did not (35%).
- *Psychosocial problems.* These are due to stress, grief, self-stigmatization, neglect and abuse, social isolation and discrimination. Studies and informants have often noted that impacts are often worse when children are separated from siblings and when they are given not given a clear idea of plans for their future. Stigmatisation and withdrawal affecting orphaned children were frequently noted. Around one third of learners surveyed felt that families affected by HIV/AIDS were treated badly.²³ Non-physical maltreatment of children from AIDS affected families were most commonly cited, and included avoidance, teasing and neglect. Indications of inability to deal with psychosocial problems, such as lack of motivation, bad behaviour and social problems or drug-abuse, though not specific to orphans, were frequently cited as reasons for drop out by teachers. A number of informants mentioned problems of loss of parental guidance and socialization to reinforce learning, school-going, and appropriate cultural and other value systems. Others noted that orphans and other HIV/AIDS affected children were predisposed to fatalism and focused on short-term fulfillment that made them more likely to drop out, perform poorly and engage in high risk activities.
- *Changes in household structure and greater household responsibilities.* While many children already live with people other than their parents, new stresses related to orphanhood were frequently noted by informants. The school survey suggested further dimensions of vulnerability. Around 40% of all teachers were aware of children in their school or community who lived in child headed households, and 6% reported that they knew of learners in the school who lived on the streets. Among Grade 10 students, 39% reported that one or more care giving or other household activities had caused them to be absent from school. This appeared to be somewhat more frequent among maternal orphans (50%) and children who did not live with either of their parents (47%).

A social worker in Northern Namibia described the hardships faced by children as a result of orphanhood.

“It is unfortunate that most families don’t prepare themselves for death. Orphans are facing so many problems that they simply cannot cope with on their own. Any form of assistance from the Government requires paper work and so much information is taken to the grave with caregivers. So many families bury their dead and cannot afford to get death certificates or birth certificates for the surviving children. I have visited many child headed homes that have not received any help because there is no money for transport to come to town to seek assistance. Many are not aware that they can be helped. We can only depend on schools, extended families, and community members to provide us with information for estate and maintenance allowances, school fee exemption and foster placement grants.

As social workers we are constantly working to ensure that orphans basic needs are taken care of, that is, shelter, education, clothing, and where possible, food. The emotional needs of these children are often neglected. Even though we are trained to counsel them we have no time to sit with them or to make follow up visits. Children who demonstrate psychological distress because of death or abuse are referred to the hospital where they are admitted and housed with other patients. There are limited facilities there to assist these children, many of them are exposed to other diseases. Some of our orphans who have not been placed in foster care are also staying at the hospital too....that is no place for children. The needs of orphans cannot be met through isolated efforts by social workers even if we

²³ A large number of learners participating in the school survey were of the impression that the most common ways in which orphaned children were treated differently related more to "soft" treatment issues rather than things only related to their material needs, e.g. neglect, lack of support, avoidance

were to work twenty-four hours a day. I spend most of my time in court and in transit from one place to the other, it is almost impossible to stick to the quarterly plans that we develop for ourselves. These children are the responsibility of the community. Teachers, relatives, neighbours, friends must be able to assess when a child is in need of care and must know what to do and who to notify. We must give these children priority otherwise they will become criminals.”

Important conclusions about vulnerability of education outcomes to effects of AIDS orphanhood include the following:

- *Orphanhood is seen as a significant problem* by schools, particularly in areas with more advanced epidemics. Stress is affecting orphans, teachers and learners who observe effects on their peers.
- *Even in areas where the HIV/AIDS epidemic is still at low levels, vulnerable children are a significant problem* due to socio-economic and other factors.
- *Material needs of orphans are seen as the most pressing issue* by most teachers and schools.
- *Orphans’ vulnerabilities cannot, for practical purposes, be separated from those of other children in poverty.* A significant number of respondents who participated in the school survey were of the opinion that vulnerability was not restricted to orphaning. 31.8% reported that they or other children in their households have gone hungry.
- *Impacts associated with orphanhood often occur before parents die,* due to effects of illness on their household and children’s psychological state in the period leading up to the death.
- *Successful avoidance or management of short-term crises* can enable many orphans to continue successfully with schooling.
- *Pressures on orphans and other vulnerable children are putting them at high risk of HIV infection.* They may be more likely to resort to unsafe sex for material or psychological reasons and are at high risk of abuse and exploitation.
- *There is mixed evidence on whether girl or boy orphans are more vulnerable to educational problems.* But there are indications that gender related vulnerability, particularly of older girls and younger boys is a definite possibility, so sensitivity to gender issues should be ensured.
- *Current data may under-estimate the impact of orphanhood on education outcomes* in Namibia, for several reasons:
 - *Many school-staff clearly have limited sensitisation and awareness* around the issue and probably under-report impacts. School based surveys may also underestimate numbers of orphans if many have already dropped out or attend erratically.
 - *Namibia is at a relatively early stage in its orphan epidemic.* At current rates of orphanhood effects may still be difficult to identify in many classrooms. Extended families and other support systems, which are already strained in many areas, may become increasingly strained in future, and important effects such as re-orphaning of children may become more common.
 - *More subtle effects may be difficult to identify at this stage,* that are important in a schooling system that is striving to improve quality and access. For example, group psychological effects of the epidemic on learners and society may change norms around schooling unpredictably.

2.4 Needs to be addressed to Protect Orphans and Other Vulnerable Children

Various obstacles to successful education of orphans and other vulnerable children are illustrated in the table below, along with support functions that can reduce vulnerability. *Functions in which teachers or schools could play an important role, even if they do not assume full responsibility, are shown in italics.*

Table 2.2: Obstacles to educational outcomes and support functions required

Obstacles to good educational outcomes of orphans	Functions required to preserve educational outcomes of OVC
1. Economic pressures <ul style="list-style-type: none"> • Lack of food • Lack of clothing and uniforms • Time required to access material resources • Transport to school • Loss of housing • Disinheritance, or abandonment by surviving parents in new relationships • Limited perceived benefits of schooling 	1. Reducing economic obstacles <ul style="list-style-type: none"> • <i>Early recognition</i> • <i>Initiate registration for grants and other support</i> • <i>Assessment</i> • <i>Timely, efficient ordering and delivery of food, uniforms etc.</i> • <i>Monitoring well-being</i> • <i>Legal or practical/ logistical support eg accessing grants, ensuring inheritance</i> • <i>Effective education to ensure employment and advancement</i>
2. Home environment, roles and responsibility <ul style="list-style-type: none"> • Demands of caring for the sick, elderly or siblings • Inadequate parenting by the elderly, extended family, or siblings • Discrimination and stigma in the community and some extended families • Excessive numbers of children requiring care in certain households • Separation from siblings²⁴ 	2. Ensuring supportive home circumstances, roles and responsibility <ul style="list-style-type: none"> • <i>Early recognition and mobilising assistance</i> • <i>Assistance in parent's life planning, including transfer between schools</i> • <i>Support of weaker systems</i> • <i>Support older siblings in carer/ parent role</i> • <i>Ensure sibling contact and avoiding separation</i> • <i>Fostering (placement, monitoring and support)</i>
3. Psychological trauma <ul style="list-style-type: none"> • Trauma of illness and death of parents and other family and friends • Fear of infection • Stigma (in community and school) • Bereavement and unresolved grief²⁵ • Behavioural disturbances • Abuse 	3. Ensuring psychological stability <ul style="list-style-type: none"> • <i>Counselling</i> • <i>Peer support</i> • <i>Reducing stigma</i> • <i>Recognise abuse</i> • <i>Managing behavioural disturbances</i> • <i>Legal protection</i>
4. Greater HIV risk <ul style="list-style-type: none"> • Abuse • Commercial or other high risk sex by children under economic or otherSubstance abuse 	4. Reducing HIV risk <ul style="list-style-type: none"> • <i>Assertiveness and life-skills</i> • <i>Counselling</i> • <i>Ensuring and monitoring economic, legal or other support</i> • <i>Regulating liquor and bars</i>

²⁴ Sibling separation is recognised as a major trauma for OVC. Parents and other adults are often insensitive to this and do not set up ways for siblings to maintain contact.

²⁵ Mechanisms to allow children to grieve and to support them were reported to often be limited, particularly as traditional extended families have become disrupted.

2.5 Current responses to needs of orphans and vulnerable children

2.5.1 Aspects of the legislative and policy environment pertaining to OVCs

Namibia was the first African country to complete a national Plan of Action for Children and to ratify the Convention on the Rights of a Child. The Constitution of the Republic of Namibia, in article 15, recognises the importance of legislation enacted to protect the best interest of the child. It calls for the protection of children from economic exploitation or any form of labour that is likely to be harmful to their health or physical, mental, spiritual, moral, or social development.

The MBESC have participated in efforts to inform key policymakers and legislators about domestic legislation that is need of revision in order to meet the needs of vulnerable group in a more expeditious manner. Currently, bills have been tabled to parliament that, if passed, will better regulate matters pertaining to, amongst other things, child care, protection and development, administration of basic state grants, inheritance, and registration of certain institutions for the reception of children. The MBESC is currently working with the Legal Aid Centre to develop an HIV/AIDS policy for the education sector that will ensure for the protection of the rights of infected and affected learners.

2.5.2 Other forms of Support to Orphans and Vulnerable Children

The MOHSS along with NGOs have led most responses to the needs of vulnerable children. This has resulted in progress in many areas, but the overall response has been characterized by fragmentation, limited coordination, duplication and limited coverage.

In its strategic and operational plan, the MBESC recognizes that HIV/AIDS is likely to result in the increase in orphanhood and in turn in drop out rates. It has identified addressing the scale of this problem as a priority for management and proposes that efforts be made to design means of continuing education through vocational education, flexi-time schooling, mentoring and other creative approaches to support.

In the mid-1990's, the MBESC set up an intersectoral task force on educationally marginalised children including war orphans to increase their access to schooling. The policy on educationally marginalised children, which is now being implemented, pays limited specific attention to the impact of HIV/AIDS but stresses the need to train teachers to handle orphans' needs. A charter for primary and secondary has been developed, which outlines what every child should expect from the MBESC. The Ministry has produced guidelines and press releases to inform people of the right to exemption from school development funds and hostel fees. However there is strong evidence to suggest that many families do not exercise their right to obtain fee exemptions for children because of a lack of knowledge and inefficient bureaucratic procedures. Feeding programmes have been instituted in selected schools that host learner populations from educationally marginalised groups.

At school, circuit and regional level there has been very limited official guidance on school roles related to needs of orphans and other vulnerable children. Most responses have been initiated by religious bodies and the MOHSS through its social workers. Some efforts have been made by the regional Special Education Units particularly around fee exemption support, but these measures have generally occurred on an ad-hoc and basis at the discretion of the Head of the Unit. In some regions there has been conflict over the high numbers of children that Social Services were referring to the MBESC for exemption assistance. School level responses have included:

- *Assistance with material needs.* These include obtaining funding for fees, referral of children to social workers and/or NGOs, and cooperation with communities in development of nutrition

gardens. Some teachers give ad hoc assistance to children in the form of clothes, food, materials and uniforms.

- *Addressing higher level/comprehensive needs.* Some schools provided in-school counseling while some teachers simply gave children an opportunity to talk. Referral to regional counselors, social workers and community elders in cases of abuse or other more gross problems occurred but was generally infrequent. Some peer groups had provided elements of support.
- *Flexibility to maintain access of vulnerable children to schooling* This includes non-exclusion for children who cannot pay fees and accommodating periods of absence by orphans and other children with household crises.

Several key themes emerge of relevance to improving support to vulnerable children:

- *Schools lack of a tradition of responsiveness to vulnerable children's needs.* Many teachers and schools do not see it as part of their responsibilities to identify and respond to needs of vulnerable children.
- *There is no standard system to identify orphans and other vulnerable children* to enable pro-active management of their needs. Teachers tend to recognise vulnerable children's problems late when they manifest as gross "discipline" problems or inability to pay fees. Opportunities to help children avoid crises and to manage issues such as transfer to new schools are lost.

"On the surface it may appear as if these children's problems are as simple as inability to pay fees but you later discover that their problems are much more complex".

Social Worker

- *A wide range of support functions are needed by vulnerable children and are feasible.* Needs of vulnerable children extend far beyond inability to pay fees or psychological problems. However, responses of a number of communities, NGOs and schools demonstrate that responses are possible.
- *A number of internal and external role players and resources are usually available* to most schools.
- *The capacity of schools and any other role players has to be assumed to be very variable* and no single role player has capacity to perform all functions that are required (see Box 1 below).
 - *The capacity of other key role players, particularly social services, NGOs and communities is far too limited to meet the scale of needs* reported by schools. Small numbers of social workers often serve vast areas and populations. They are overwhelmed by multiple functions and administrative burdens and cannot cope with rapidly expanding demands related to HIV/AIDS. NGOs also have limited coverage and capacity.
 - *Motivation, skills and capacity within most schools* to deal with vulnerable children is limited and it cannot be assumed that any particular cadre of staff (e.g. guidance teachers) will consistently be able to deal with all vulnerable children issues alone.
 - *Broader support systems for vulnerable children within the MBESC are generally weak.* Regional counselling services are remote, have limited capacity and are not considered to be a real resource by most teachers. They have given limited attention to needs of orphans and similar vulnerable children
 - *Particular communities face extra constraints.* For example, community, NGO, HBC's ability to support vulnerable children has been severely eroded due to the security situation in areas of northern Namibia.
 - *Lack of systematic definition of roles, responsibilities, mandates and co-ordination between role players* in and outside of schools is a major obstacle to effective action

"We are in conflict with the Ministry of Education about the numbers of children that we refer to them for fee exemption. The Ministry feels that it is receiving more requests for exemption than it can handle." Social Worker.

2.5.3 Obstacles to effective, sustainable OVC support

A number of the obstacles that affect ability of various role players to provide more effective support to OVC are shown in the box below.

Box 1: Key Role Players and Obstacles to effective, efficient support of OVC

1. Guidance and Counselling Teachers and Counselling and Support Groups

- Limited capacity, skills and training – theory vs practical
- Poorly defined career paths and appointment/ distribution – gap filling vs skills & motivation
- Poorly defined role definition, referral systems and mandates
- Limited time tabled, teach other subjects – prioritise examinable subjects
- Limited support from school heads, class teachers, regional school counsellors and MBESC
- Stigma and limited trust by learners

2. Class Teachers

- Roles not clearly defined, lack of guidelines
- Limited skills eg early recognition of vulnerability, counselling, other
- HIV/AIDS knowledge and misconceptions
- Limits on motivation and fear of over-extension once they get involved
- Limited support and guidance
- Trust

3. Peer Support

- Limited knowledge, experience and skills
- Structures and systems e.g. referral networks generally appear weak
- Limited recognition of potential roles
- Stress on peers and other possible limitations such as e.g. trust and difficulties ensuring that credible peers are involved.

4. School infrastructure and resources

- Lack of rooms for counselling and interviews
- Lack of budgets for innovative support of OVC, and transport or reimbursement for outreach activities

5. Social Workers

- Limited capacity (skills, training, numbers, unfilled posts), leading to passive identification of orphans and delays in many aspects of responses and basic support.
- Inefficient use of time and skills – minimal counselling and bureaucratic procedures
- Inefficient systems – guidelines, referrals, feedback and networking
- Poor communication with other sectors, including health and education
- Limited leadership and direction, in a period of uncertainty due to transition
- Grant systems- stigma, design and implementation not effective

6. HBC and Health Workers

- Capacity; awareness and leadership from health sector; weak networks with education, social welfare

7. School Boards, Other Community and NGO/CBO

- School Boards have varying strength and parents in many cases seem are inhibited in working with schools on HIV/AIDS issues
- Other community/ NGO resources vary in strength and unequal distribution between areas; limited awareness; capabilities; limited systematic integration and support by government; some extended families near breaking point
- Varying mobilisation of traditional and other community leadership.

8. Police and Legal system

- Limited awareness; guidelines, legislation, regulations; capacity; training with respect to psychosocial issues and interviewing; delays; restricted access due to lack of resources.

9. Regional co-ordination

- RACOC and RACE – variable strength and development of education related responses to OVC
- Vocational and non-formal education not integrated with school response
- Remote areas less informed/ mobilised and have more limited resources

10. Policy framework

- Lack of clear policies, traditions, guidelines or mandates on OVC
- Lack of clear mandate on intra and intersectoral collaboration

2.6 Recommendations on protecting the educational and development prospects for OVC

Poverty and other social problems lead to poor education outcomes for large numbers of Namibian children. Increasing numbers of orphans and social pressures created by AIDS are already adding to vulnerability, and pose a substantial threat to the MBESC's ability to meet national development objectives. Effective responses will have relevance well beyond the end of the decade.

A more systematic education sector response to the needs of orphans and vulnerable children is clearly needed, even in areas with less severe epidemics. The education sector is strategically placed to interact with vulnerable children, as it has the nation's largest body of professionals and an organizational network throughout the county. This represents a major resource to the nation in reducing HIV/AIDS effects on the next generation.

2.6.1 Defining a realistic strategy to address needs of vulnerable children

Experience with needs of orphans in other African countries has led to calls for re-conceptualisation of the school as *"a multi-purpose development and welfare institution"*. This challenge is daunting to most education managers and staff. What seem to be realistic responses to this challenge in Namibia?

Guiding principles behind this study's recommendations include the following.

- *Focus on efficient use of existing resources* rather than solutions requiring substantial extra resources, wherever possible.
- *Focus on system development* to allow more efficient use of resources *rather than relying on "capacity development"* which may be required on a huge scale.
- *Build on what has proved feasible* in communities in Namibia and other settings.
- *Flexibility and decentralised approaches are needed* to deal with local or individual limitations, and the scale and diversity of needs.
- *A Human Rights approach to developing effective interventions has major advantages* in ensuring that children's needs are met holistically. The approach includes: making the best interests of a child the primary consideration; ensuring that there are defined, accessible points of entry for children to access support systems; ensuring holistic, inter-sectoral but prioritised responses to meet the full range of priority needs; participation of children; integration of responses with community, family and other key role players; and ensuring accountability at all levels.

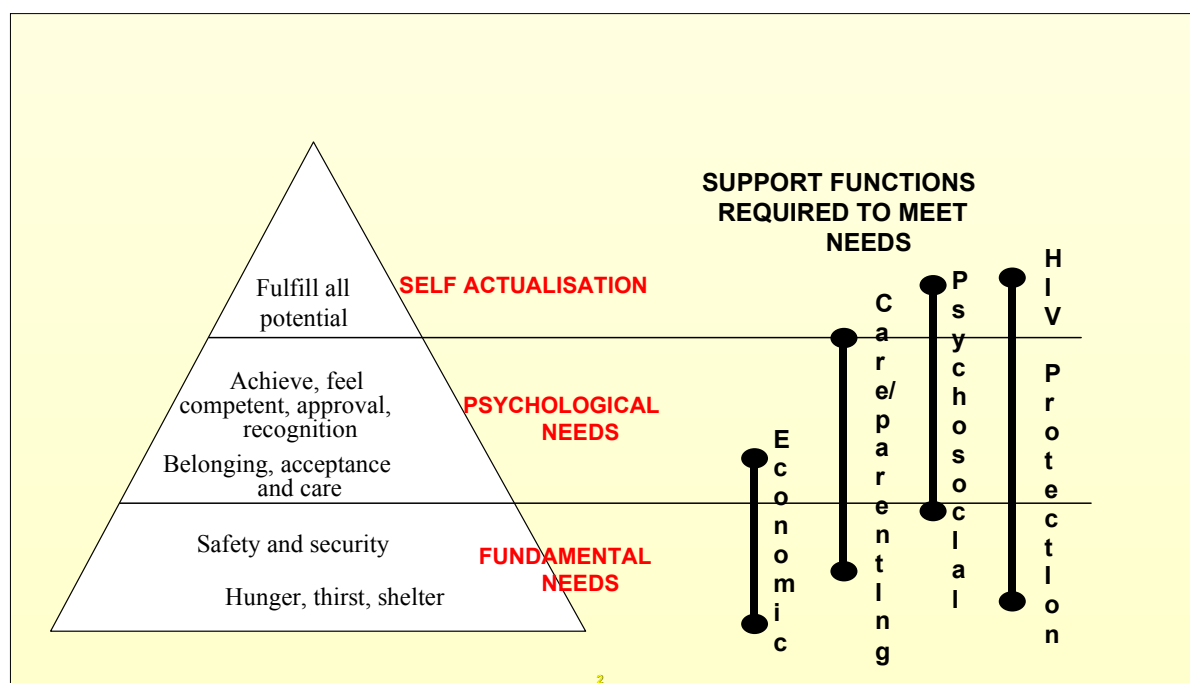
Prioritisation of functions of the education sector to preserve education outcomes of vulnerable children is required to make the challenge more manageable. The following basic priority functions are proposed based on their likely effectiveness, strategic advantages of the sector, and constraints on it and other role players:

- *Keep children in school* through pre-empting (or managing) crises to stabilise vulnerable children. Bringing children back to education tends to be very difficult, and vulnerable children's needs are much easier to address while they are still integrated into a formal system.
- *Key education sector functions to keep children in school are:*
 - Early recognition of vulnerability.
 - Timely response to prevent drop-out / performance problems
 - Referral to other resources when schools cannot provide support in house
 - Monitoring of well-being
- *Tackle basic needs and assistance before complex services.* Basic needs were consistently identified as priorities for orphans and vulnerable children. Children who do not have basics such as food, clothing, shelter and fees are unlikely to have successful education outcomes regardless of other services. Many psychosocial problems can be resolved or avoided if stresses related to

basic needs are resolved. Sophisticated aspects of psychosocial support and counselling need development but this tends to be a complex challenge and they should not be the immediate priority in responses.

The proposed focus on basic needs does not deny the importance of making progress in addressing higher level psychosocial needs. Important inter-connections between the categories of need in reality cannot be ignored. For example, meeting basic needs most effectively may involve engaging with family dynamics to ensure plans are made for orphans to be taken into family homes and that grants are applied for. In particular, as indicated in Figure 2.8, protecting OVC from high risk of HIV infection is often likely to require that a number of their higher level needs, such as dealing with stigmatisation, self esteem and psychological stress are addressed.

Figure 2.8: A hierarchy of OVC needs to guide prioritisation.



Enabling dropouts to re-access education is another important function. Although it is likely to be less efficient than helping children to stay in school, learner attrition is already a large challenge in Namibia. The MBESC therefore needs to continue to make schools more receptive to re-entry and explore efficient use of non-formal, distance and vocational training to ensure that children who drop out can still acquire key life-skills.

2.6.2 Specific recommendations – improving support of orphans and vulnerable children

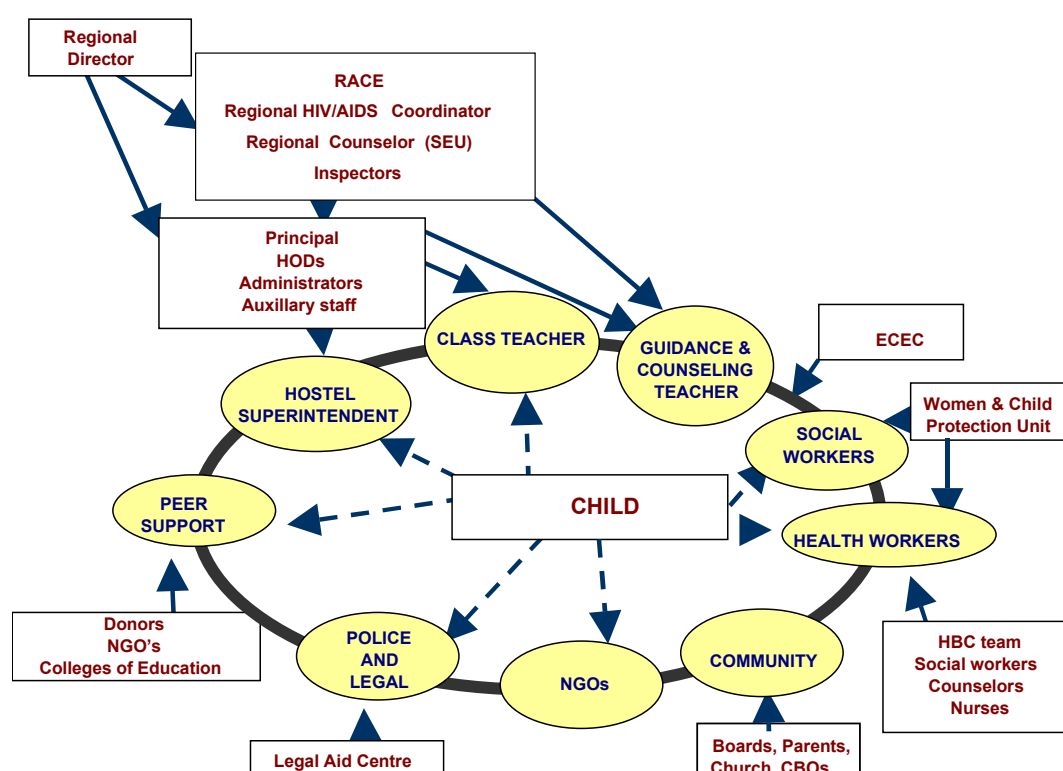
- 1) **Clarify overall policy on the role and obligations of schools, other education institutions and other sectors** in relation to orphans and vulnerable children. Policy and guidelines can build on those developed for marginalised children.
- 2) **Develop systems to identify vulnerable learners.** Schools should administer a social register system to all learners at least twice yearly to identify vulnerable children. The system should be action orientated and schools should ideally have plans for specific responses to vulnerability

before it is implemented. Guidelines should be developed to assist teachers to assess learners' vulnerability, prioritise responses and be sensitive to possible gender related vulnerabilities.

- 3) **Develop "Circles of Support" for each school.** This model for supporting vulnerable children is based on developing networks with available resources inside and outside schools. The network is intended to maximize use of available capacity to respond to the wide range of vulnerable children's needs, and ensure allocation of functions in the most manageable and efficient way. A key objective is to support and help to coordinate, but not undermine, community and other initiatives. Potential resources are shown in Figure 2.9. The precise resources that are incorporated into the circle from in and outside of a school may differ according to the capacities and logistical issues prevailing in the school and community.

Social interdependence is necessary in order to realise the rights of a child, UNICEF

Figure 2.9 Circle of Support for orphans and vulnerable children



Key actions to ensure that Circles of Support are formed and are functional include the following.

- *Define the roles, responsibilities and accountabilities of schools and key education stakeholders* such as the school heads and SEU in responding to vulnerable children.
- *Negotiate effective buy in and commitment of key external players at all levels* to support the Circle and enforce effective participation. Critical stakeholders include NACOP Social Services, Local Authorities, home based care and other health services, RACOCs, NGOs/CBOs and parents, Boards and the community.
- *Review legislation and regulations* to ensure that they allow for efficient allocation of resources and functions within Circles.
- *Develop and publicise roles and guidelines* on circle formation, accessing support and approaches to particular issues such as abuse and the particular needs of the girl child.

- 4) **Enhance capacity within schools to coordinate Circles of Support and provide specific support.**

- *Strengthen the number and skills of Guidance and Counselling teachers* to address vulnerable children issues but avoid over-reliance on guidance and counseling teachers alone.
 - *Build class teacher sensitisation, skills and confidence* to recognise and manage vulnerable children. Consider using capacity of NGOs (e.g. Catholic AIDS Action) for basic training.
 - *Refine roles of national and regional SEUs and regional counselors* so that their expertise and capacity are used more effectively in programme development and school support.
 - *Consider refining current regional school counsellor brief so that it proactively addresses the needs of learners infected and affected by HIV/AIDS* and caters for the needs of special children; and responds appropriately to already existing initiatives at the community level.
 - *Consider more formal integration of social workers into the education system*, to maximize use of their skills in support of vulnerable children.
- 5) ***Consider creation of a fund to finance direct costs of vulnerable children's education including fees, uniforms, and education materials.*** Namibia has formal Social Services grant systems and structures. These should ideally form the basis of support for vulnerable children, particularly as many children's most pressing needs extend beyond direct schooling requirements. However, it is clear that social service systems are overloaded and inefficient. Unless their performance can be improved urgently, there are likely to be significant benefits in education sector funds to meet at least school-related costs of vulnerable children, and possibly be a vehicle for more extensive support if necessary. Experience of initiatives such as the Basic Education Assistance Module in Zimbabwe provides some guidance on programme design.
- 6) ***Expand school feeding and nutrition programmes.*** School feeding schemes have proved effective in boosting enrollment and need for feeding is widespread in areas of Namibia independent of HIV/AIDS impacts. Morning meals have also been shown to be associated with better learner performance in some settings.
- Consider ways to ensure that targeting of nutrition programmes ensures effectiveness and sustainability.
 - Consider systematic support of income generating activities and nutrition gardens as a supplement or possible alternative to feeding schemes that can also build solidarity and empower vulnerable children.
- 7) ***Enhance flexibility and responsiveness of school organisation and systems to vulnerable children's needs.***
- *Ensure effective inter-school referral systems* to minimize disruption and support when learners have to be transferred after a parent dies.
 - *Ensure adequate flexibility in scheduling and rules*, including school hours, responses to being late/erratic attendance, age norms, facilitation of homework
 - *Review hostel and accommodation policy* to ensure support of the most vulnerable.
 - *Consider community boarding alternatives for learners in areas* where there are limited or no facilities. Community-based orphan care has been identified as the best and most cost-effective way of caring for orphans and other children in need of accommodation. Institutions, though popular, are very expensive to run, have limited capacity and only really cater for physical needs. Effective guidelines and monitoring systems would need to be developed to ensure for the protection of the learner.
- 8) ***Involve learners in decision-making, planning and responses wherever possible.*** Learners often have better understanding of their needs and appropriate responses than educators and planners.
- Reinforce peer solidarity and develop means to communicate information on rights, responsibilities and support systems
- 9) ***Actively support initiatives to strengthen capacity and efficiency of Social Services.*** Social services are currently challenged by major capacity constraints, organizational restructuring, and

inflexible legislation, regulations and practices that lead to inefficient responses to the needs of vulnerable children.

- Support greater allocation of resources and capacity to social work functions.
- Advocate for review of restrictive legislation, regulations, procedures and practices to relieve social workers of bureaucratic burdens and create flexibility for schools and other role players to take on various functions (e.g. certification for issue of birth certificates; monitoring of children on grants) where appropriate.

10) Mobilise more resources for education sector initiatives. The MBESC should advocate for allocation of funding to support an expanded role in support of orphans and vulnerable children. Possible sources include MOHSS allocations to provide for school fees and other basic needs of children as well as other NACOP and donor funds.

11) Address the specific vulnerabilities of learners with special needs.

12) Other issues

- Develop and disseminate a Code of Conduct on confidentiality and other issues in dealing with vulnerable children.
- Simplify laws and policies and produce user-friendly booklets to inform children of their rights, and teachers of their mandates and responsibilities in relation to vulnerable children.
- Consider extending the mandate of the Task Force on Marginalised Children to include addressing the needs of learners affected and infected by the epidemic.

2.7 Needs of infected learners

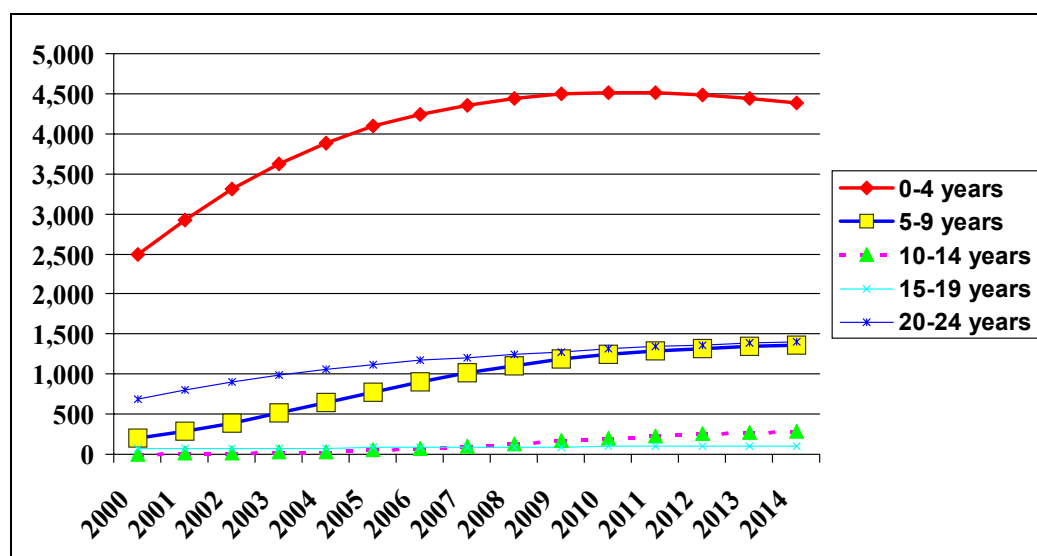
Education institutions will contain significant numbers of learners who are infected with HIV through maternal transmission around the time of birth, sexual abuse or relationships in their teens. Most children infected at birth will die before the age of five but significant numbers will, over time, reach school age.

2.7.1 Projections of the number of ill and infected learners

The proportion of children and youth who are infected with HIV will vary at different levels in the education system. Projections suggest that among children aged 5-9, less than 1 in 400 students are infected, rising to around 1 in 100 by 2010. Less than 0.5% of 10-14 year olds and around 5.5% of 15-19 year olds are estimated to be infected. Infection levels then rise to around 20% in the 20-24 year age group. Levels are expected to be quite constant over the decade if risk behaviour does not change.

The proportion of children ill with AIDS, even by 2010, is expected to remain below 0.5% in the 5-9 age group, and will fall to below 1 per 1000 among 10-14 year olds and 15-19 year olds. It will then rise (but still to fairly low levels) to 1 in 200 in the 20-24 year age group. Death from AIDS is likely to be substantially lower than deaths from other causes in Namibians between age 10 and 20. Although in some schools rates are likely to be above the averages presented above.

Figure 2.10: Number of AIDS cases by age group



2.7.2 Empirical Evidence of HIV amongst learners and risk factors

The school survey and visits confirmed that AIDS illness among learners is not a frequent or priority issue in most schools.²⁶ However, they also suggest great potential for stigmatization, isolation and compromised education for chronically ill learners, including those who do not have HIV/AIDS. Learners' physical symptoms were the most commonly mentioned foundation for teachers believing children to be infected with HIV or ill with AIDS. This was mentioned by around 40% of teachers who said they knew of HIV infected children. The next most common foundation for the belief that a child was HIV infected was through the learners association with others who are ill or have died of AIDS, indicating that some non-infected learners, particularly AIDS orphans may be considered to be infected, with potential for stigmatisation. When teachers were probed for the main problem they saw with ill and infected learners, most commonly mentioned problem was absenteeism, mentioned by 21% of all teachers and accounting for 35% of the problems mentioned. Poor performance and social isolation were the next most common problems mentioned, mentioned by around 9% of teachers.

²⁶ Around 9% of teachers overall (95% CI 5%; 14%) reported that there were children in their school thought to be infected with HIV or ill with HIV/AIDS. There were marked differences by level of school. Some 3% of teachers in primary school knew of ill or infected children compared to 14% of teachers in combined schools and 21% of teachers in secondary schools. Differences were statistically significant, with teachers in combined and secondary schools being far more likely to know of ill and infected children than their counterparts in primary schools (OR=6.3 (95%CI 1.6;35.6)). Estimates of numbers and rates of ill and infected children were difficult to interpret owing to a very poor response on this question. Estimates for children ill with AIDS, ranged from 0.1% of children in the school to 10% of children in the school. Overall, there were a total of 116 children thought to be ill with AIDS in the sampled schools. Based on a denominator of 5223 (the total learner population in those schools that provided data), this gives an estimate of 2% of children ill with AIDS. This is clearly an over-estimate that can in part be explained by non-response to the question by those teachers who in fact believed that no children were ill with AIDS. (these non responses were counted as missing values, and not as zeros).

Table 2.4. Main problems associated with ill and infected learners (teacher perceptions)

	n	% problems mentioned	% teachers
Absenteeism	39	35%	21%
Teased or bullied	11	10%	6%
Avoided/social isolation	17	15%	9%
Drop out permanently	8	7%	4%
Poor performance	17	15%	9%
Depression	3	3%	2%
Specific diseases	11	10%	6%
Other	5	5%	3%
	111	100%	

Recommendations - infected learners

Significant numbers of learners in the education system will experience psychological stress and stigmatization around HIV infection, and a small proportion will actually be ill with HIV/AIDS. Learners, who are under stress because they fear that they are, or will be infected, may often be more numerous than those who are actually infected. In any individual case the stress for individuals and institutions involved, and potential for violation of rights will be significant. In general, however, prevention of sexual transmission and management of other impacts of HIV/AIDS on learners are likely to be larger challenges and higher priorities.

- 1) ***Strategies for counselling and psychosocial support should consider needs of learners who are infected or fear that they are infected.*** Networking with resources located in Special Education Units, and outside the sector with NGO's, religious groups, Voluntary Counselling and Testing programmes and other counselling services outside of schools is likely to be a key part of strategy.
- 2) ***Develop and disseminate policies and guidelines on the following issues***
 - *Accidental exposure to HIV and opportunistic infections.* Universal precautions against accidental infection, and issues around TB and other opportunistic infections are important. However, risk of accidental exposure to HIV infection in most institutions is likely to be very small. Guidelines must thus avoid provoking unnecessary anxiety about accidental exposure, particularly as this can reinforce stigma and lead to poor care of injured children and staff.
 - *Rights of infected learners' to education and well being.* Guidelines and codes of conduct should cover issues such stigmatisation, appropriate confidentiality, and reasonable ways to reduce obstacles to continued education of infected or ill children.
 - *Approaches to ensure medical and other support for children who are ill with HIV/AIDS in each school.* Relatively few learners will need major medical support, so approaches should be efficient and feasible and mainly rely on networks rather than in-school provision.
- 3) ***Develop communication and training strategies to build staff confidence*** in managing issues around infected and ill students.

"We are all responsible even if we are not to blame"
Headmaster, Swakopmund

3. How will HIV/AIDS affect capacity to deliver education?

The education sector is the largest employer in Namibia. The MBESC already faces substantial challenges to improve access and quality of education. There are shortages of capacity at all levels and learner teacher ratios have remained quite constant at around 31 over the last decade, with significant inequity between regions.

Much of the teaching force is relatively young, inexperienced and un- or under-qualified. These factors along with a lack of teaching materials have been widely cited as important obstacles to delivering effective education in Namibia. A further problem is the shortage of qualified staff in some specialist subject areas, with an ongoing need to recruit expatriate educators in recent years.

Most HIV infected educators and other staff can be expected to remain well and lead fulfilling, productive lives for many years before they develop more severe complications associated with AIDS. The length and quality of their lives can be enhanced by antiretroviral drugs, treatment of opportunistic infections and positive approaches to living with HIV/AIDS. It is possible to actively reduce negative effects of AIDS illness and death through better understanding of the impacts of HIV/AIDS on employees, and on the function of the education system as a whole.

3.1 International and general workforce experience

HIV/AIDS clearly imposes large human costs on employees in many workplaces. From an employer's viewpoint, HIV/AIDS among employees imposes both direct and indirect costs on organisations. In some cases these result in clearly recognisable financial costs. In others, they may lead to hidden costs, including increasing inefficiency and lower performance of an organisation. Particularly in the public service environment, with relatively fixed budgets and inability to increase spending, these indirect costs have the potential to be of greater significance.

Direct costs result firstly from increasing costs of medical care for employees and dependents with HIV/AIDS. Other direct costs can arise from increasing claims on pension, life and disability cover by employees with HIV/AIDS. In Malawi, the cost of group life assurance increased by five times from 1987 to 1997 (Myslik, 1997). In Zimbabwe, it was estimated that AIDS related deaths already made up 48% of individual and 38% of group life insurance claims in 1995 (SAfAIDS, 1995). The cost of an average set of risk benefits in South Africa was expected to double between 1997 and 2007, unless benefits were restructured (Table 3.1)

Table 3.1. Projected costs of risk benefits as a percentage of salary in South Africa

	1997	2002	2007
Lump sum death or disability benefit	1.5	2.9	4.5
Spouse's pension	4.0	5.9	7.5
Disability pension	1.5	2.1	2.6

Source: Metropolitan Life Ltd

Indirect costs arise from the following impacts.

- Employee absenteeism due to illness, funeral attendance or caring for sick family members.
- Higher recruitment and training costs. Replacement involves time and training. Many new employees or trainees may themselves become ill with AIDS. Some Zimbabwean firms have

reported that they hire or train up to three employees for single posts to avoid disruption due to HIV/AIDS absence and deaths.

- Loss of skilled employees due to HIV/AIDS illness and deaths. This can disrupt work in individual organisations and, in the longer term, increase market wages for people with scarce skills. An increasing proportion of employees will be inexperienced, potentially reducing availability of experienced employees to provide formal or informal training.
- Reduced job performance due to physical disability or increased stress created by knowledge of diagnosis and stigmatisation.
- Stress and reduced morale caused by illness and death of fellow employees, friends and family members.
- Potential labour relations breakdowns and litigation costs in organisations that fail to manage human resource issues arising from HIV/AIDS.

International experience indicates that the contribution of various types of costs to overall HIV/AIDS costs varies, and some cannot easily be quantified. However, studies consistently show that non-health care and indirect costs can contribute a very substantial proportion of costs. Table 3.2 shows the findings of studies of costs in companies in Botswana, Zambia, Kenya and Zimbabwe. Costs of absenteeism and training and recruitment tend to be very significant. Where medical benefits are low, these are often not a very high element of costs, but as illustrated by the case of the Zimbabwean transport company where more substantial health benefits are offered, they can be a much larger component.

Table 3.2: Types of HIV/AIDS costs to employers as a proportion of total HIV/AIDS costs

Type of cost	Botswana 1997	Zimbabwe bus company 1997	Kenya 1994	Zimbabwe transport co. 1997
Absenteeism	54%	89%	54%	24%
Training and recruitment	23%	2%	24%	17%
Funerals and travel	1%		10%	
Medical costs	14%		12%	56%
Other benefits	8%	9%	-	3%
TOTAL	100%	100%	100%	100%

Source: Botswana National Task Force on AIDS at the Workplace (1997). AIDSCAP (1997)

Overall, studies tend to indicate that HIV/AIDS related impacts and costs are unlikely to be disastrous to larger companies and organisations in any one year, particularly as they tend to adapt where necessary. However, they indicate a long-term drain on resources and productivity that needs to be tackled.²⁷

Some indirect costs may be experienced as increases in budgets or expenditure, but many manifest as declining efficiency and education quality. This is most likely when budgets are not available to increase spending in response to impacts.

²⁷ Smaller organisations and work units, or organisations that are very reliant on key individuals tend to be much more vulnerable to absence and loss.

3.2 Susceptibility of staff to HIV infection

Namibia's education sector employees are at substantial risk of HIV infection, like any other workforce in the country. As there is no HIV prevalence survey data for educators, it is uncertain whether they are at higher or lower average risk of HIV infection than other adults in Namibia.

There is mixed evidence on educator HIV risk from other countries. Teachers are often cited as having higher risk of HIV infection than other adults through factors such as physical separation from stable partners in some settings, higher mobility and relatively high incomes and social status, which expose them to higher risk sex (Kelly 2000). There is widespread evidence from Africa that in early in HIV epidemics, more educated people are at higher risk of HIV than other adults (World Bank 1997). However, there is mixed evidence on teacher risk from other countries. HIV risk is strongly determined by the age and gender profile of employees, which may account for differences in HIV infection or death rates that have been found in some comparisons of teachers with other groups.²⁸ Nevertheless, it remains uncontroversial that HIV/AIDS impact on teachers is a reality.

In the Côte d'Ivoire, confirmed AIDS cases amounted to seven out of every 10 deaths among teachers in the late 1990s (UNAIDS 2000). In the Central African Republic, with an adult HIV prevalence of around 14%, almost as many teachers died as retired between 1996 and 1998. Of teachers who died, 85% were found to be HIV positive, and they died at an average of ten years before reaching the minimum retirement age of 52. The study recorded that 107 schools had closed owing to staff shortages, significantly more than the 66 that remained open (Meriane 2000; UNAIDS 2000).

In Zambia, death rates among teachers had risen to 3.9% by the late 1990s, and mortality among teachers was reported to be 70% higher than in the general population (Kelly 2000). In 1998, Zambia lost around 1300 teachers to HIV/AIDS, the equivalent of two thirds of its teacher training college output, and levels were expected to exceed college output by the year 2000 (UNAIDS, 2000).

In Namibia, some protective factors may put teachers at lower average risk. Teachers are relatively well informed (the 2000 DHS found that HIV/AIDS knowledge was higher among more educated Namibians). They are also relatively empowered and probably more able than the average Namibian adult to reduce their risk once they are informed and recognise their own susceptibility to HIV infection.

Nevertheless, 63% of Namibia's teachers were aged under 40 in 2001, and of these 60% were female, suggesting relatively high risk of HIV infection. In addition, discussions during regional visits suggested that many education managers and staff still have inadequate basic knowledge and awareness around HIV/AIDS. Educators indicated that many of their colleagues had not changed behaviour and that they were in denial about the reality of HIV/AIDS and their own risk or were fatalistic. Concerns were raised about risks to teachers due to low access to HIV/AIDS messages, little alternative entertainment and poor condoms in rural areas; relative wealth and status in the community; separation from spouses or other partners; and cultural values that condoned unsafe sexual behaviour. Prevention programmes are discussed in a later section, but in general it seems unwise to assume that teachers have very substantially reduced their HIV risk to date.

²⁸ For example, reported HIV prevalence rates are often not standardized for age and gender in comparisons with rates among other population groups. If a high proportion of teachers are young women one would expect them to have higher rates than other groups even if their risk exposure is similar to other young women.

3.3 Empirical Data on mortality

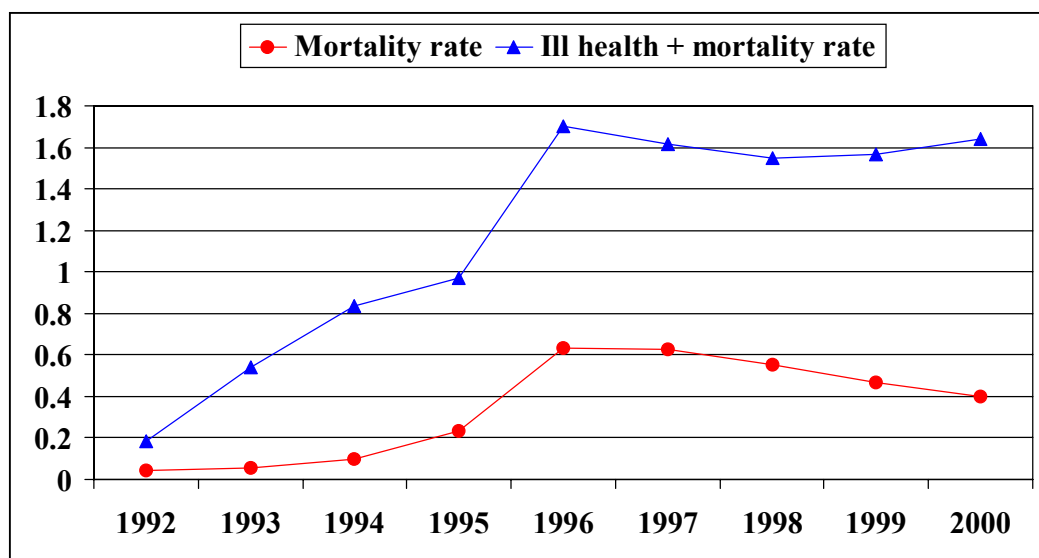
Data on illness and death trends among education sector employees is limited. Anecdotal evidence from schools and the pension fund, particularly for northern regions suggested increasing occurrence of illness and deaths among younger staff. A GIPF officer noted that for the fund overall: “We used to process two or three death claims a day and now it averages around 10”.

In the 116 surveyed schools that supplied data on this issue in the school survey, the death rate averaged 1.5 % per annum over the previous 2 years, with a higher rate (2%) in the North.

An analysis of government pension fund data revealed that 1.6% of educators accessed the fund as a result of death and ill health retirement in 2000. The trend of deaths and illness, as revealed by this analysis, is shown in figure 3.1. The data from the GIPF did not have date of death or retirement, but only the date from which benefits were paid from the fund. The fund has also recently changed its computer systems. The apparent dip in illness and mortality in recent years could therefore reflect a delay in processing claims. However, the pattern is also consistent with some educators having access to antiretroviral drugs after 1996. There is a clear pattern of increasing illness and mortality from the early to late 1990s, which is consistent with the projected pattern in figure 3.5.

The age analysis of mortality among educators suggests an “HIV/AIDS pattern” of high death rates among teachers. Survey data suggests that the median age of death of staff due to illness was quite low at a median of 36.5 years for women staff (n=31) and 40 years for males (n=30). The range of reported ages for death due to illness was 27-50 years.

Figure 3.1 Mortality and ill health attrition among Namibian educators (Source GIPF)



3.4 Projected impacts of HIV/AIDS on Educators

Projections of rates of HIV infection, AIDS illness and deaths were performed for teaching staff listed in EMIS data.²⁹ Estimation of HIV/AIDS risk was based on their age, gender and geographic

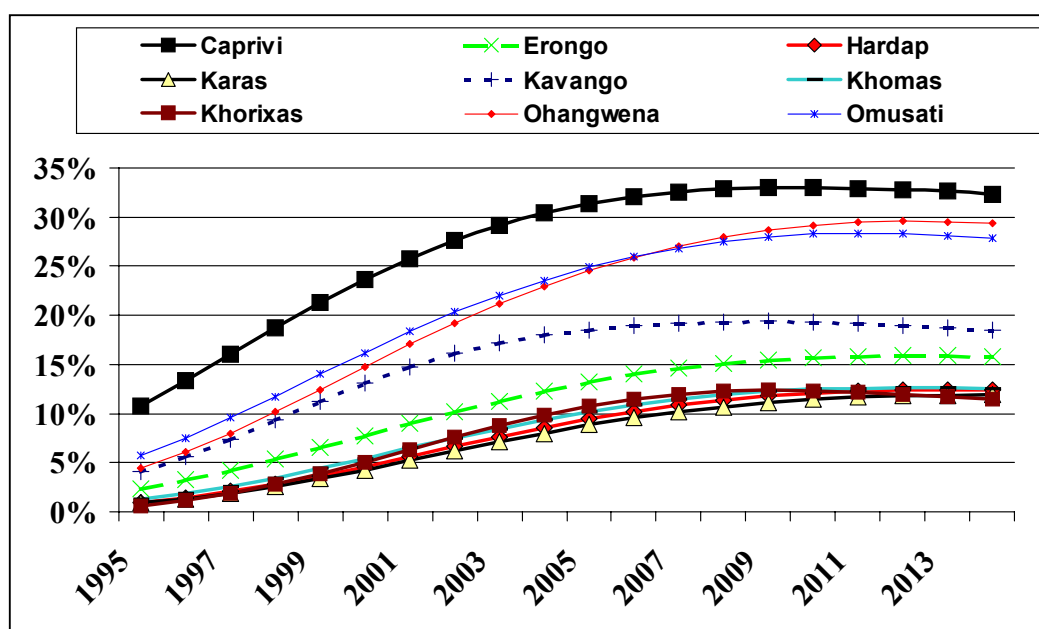
²⁹ Data on the profile of other employees was not available.

distribution, and assumed that educators risk is no different to that of equivalent adults in the general population. A further scenario was produced to identify the effects if 85% of educators with AIDS access antiretroviral drugs (ARVs) after 1997. This scenario was produced as current medical aid entitlements mean that there are few barriers to access these treatments by educators. Some scenarios were produced that assume that educators change their behaviour. The full details of how these scenarios were produced are given in Annex C.

Projections suggest that around one-in-seven educators are HIV infected in 2002. Regional projections (Figure 3.2) should be interpreted with caution.³⁰ However they suggest that levels of HIV infection reach one-in-four in Katima Mulilo, the region with the most advanced epidemic. They also illustrate that traditionally more disadvantaged areas are and will continue to be harder hit by the epidemic.

In all areas projections suggest that rates have the potential to increase markedly if risk behaviour does not change among educators and trainees.

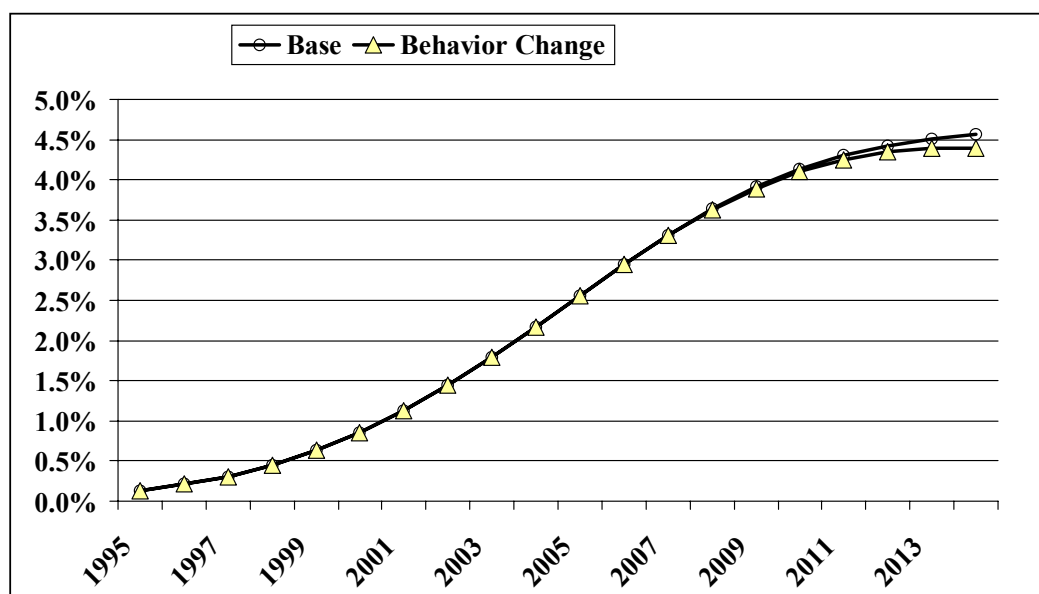
Figure 3.2 Levels of HIV Infection among educators by region



Projections indicate that the AIDS epidemic among Namibian educators is at an early stage (Figure 3.3). The figure also shows that, although projections do indicate that prevention efforts can save a significant number of educators from HIV infection over time, prevention efforts phased in from now are unlikely to substantially affect illness and death rates for some time.

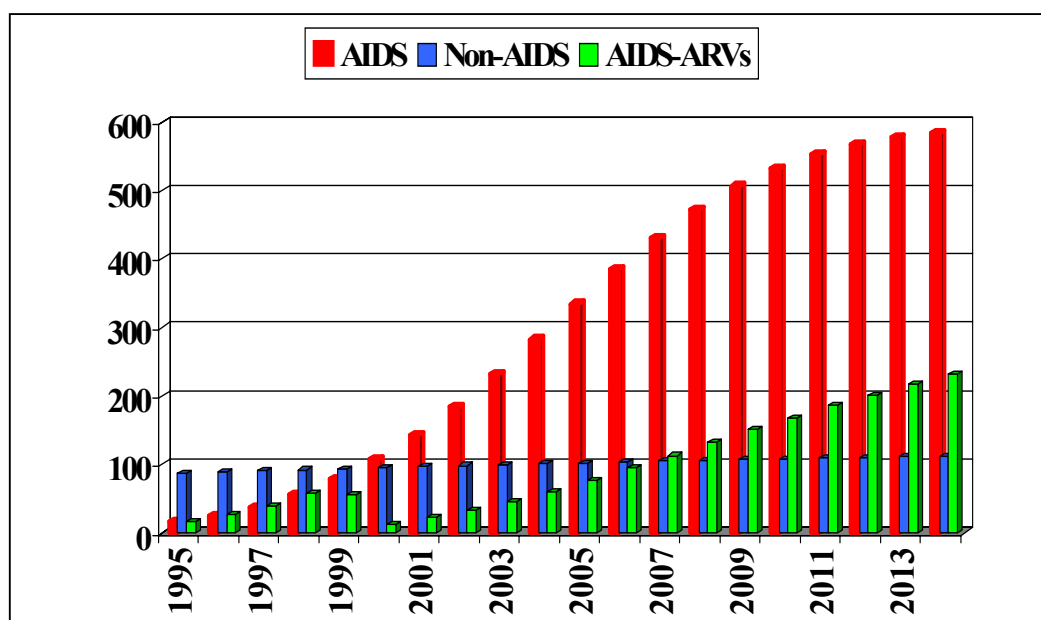
³⁰ The projections for educators cannot be assumed to be accurate at region level. They are based on current knowledge of levels and timing of the epidemic in the general populations in each area, and cannot be assumed to fully capture particular risks and protective factors affecting groups such as educators teachers, especially in regions where smaller numbers of staff are located and greater variation purely because of chance is likely.

Figure 3.3 Projected AIDS cases as a percentage of educators (no ARVs)



Projected numbers of deaths among educators are shown in Figure 3.4. The graph shows the massive reduction in the expected number of deaths if large numbers of educators have access to ARVs.³¹ They suggest that HIV/AIDS deaths accounted for 60% all deaths among educators in 2001. Of note, ARVs decrease mortality considerably but do not avoid it completely.

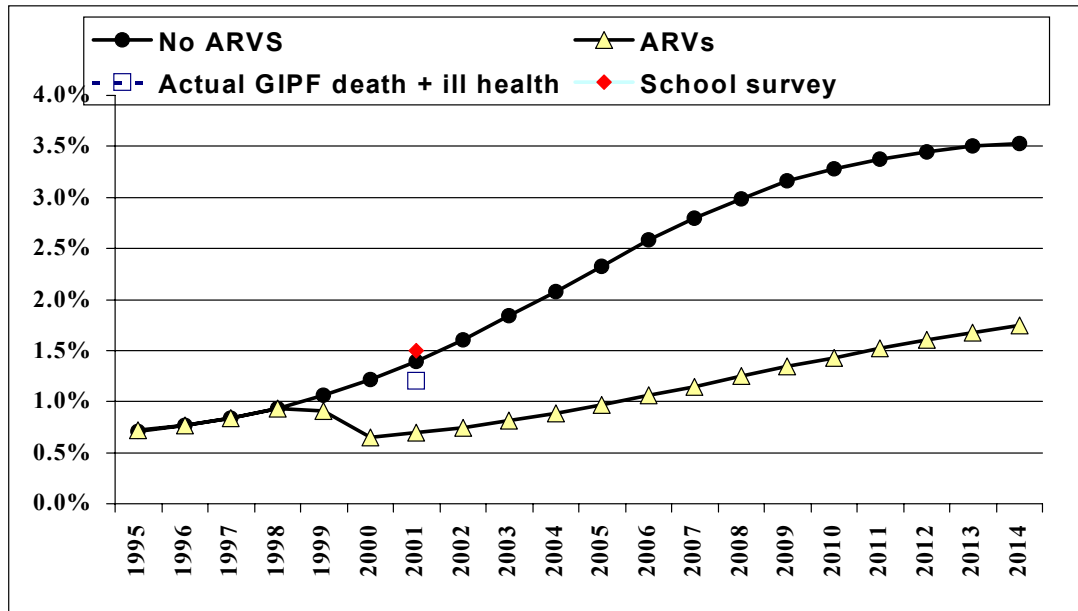
Figure 3.4 Projected AIDS deaths among educators



³¹ Projections assume that around 85% educators will be able to access ARVs when they develop AIDS. This can be considered a "best case" scenario, but seems possible if there continues to be unrestricted access to medical aid at low cost to educators, and because most educators should be able to recognise their illness and make plans to ensure that they can reach appropriate quality medical care ahead of becoming terminally ill.

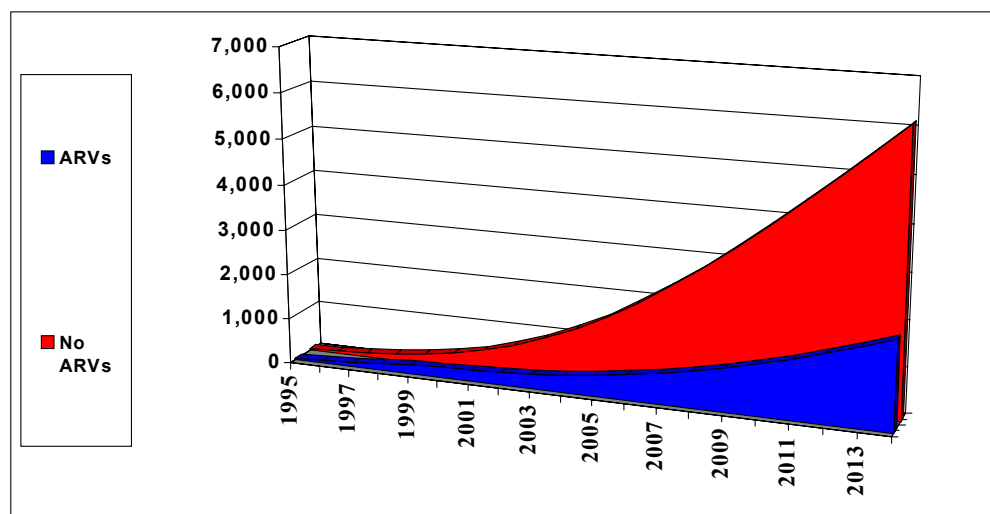
Projected annual *total* death rates without ARVs are equivalent to around 1.4% of educators in 2001, and reach almost 3.5% by the end of the decade. This is shown in figure 3.5 below. Under the ARV scenario, 2001 death rates for all causes would be around 0.7% rising to around 1.4% by 2010. Importantly, the projections indicate that for the next few years, less than 3 in 100 educators are expected to die under any scenario. These levels of impacts are easy to miss but should not be seen as any cause for complacency. Also, this rate is an average. Some schools are already experiencing illness and death among educators. This is shown by the results of the school survey, which is discussed below.

Figure 3.5 Projected educator deaths per year from all causes as a percentage of educators, including actual data from the GPIF and the School Survey.



The potential cumulative loss of educators to AIDS is large (Figure 3.6). Between 2002 and 2010, the number of educators lost due to AIDS could be 860 -3 360 under the ARV and non-ARV scenario respectively, equivalent to between 5% or 19% of the current workforce.

Figure 3.6 Cumulative deaths due to HIV/AIDS amongst educators 2002-2010 (under ARV and no ARV scenarios)



Interpretation of projections

The above projections should be interpreted with caution:

- General assumptions and limitations discussed in Annex C should be considered in any use of projections.
- Recorded rates of illness and death seem to be consistent with projections. However, the data from the GPIF may not be very reliable, and it is possible that sampling or response biases could also have influenced the result from the 116 responding schools.
- It is not clear how many educators have access to antiretroviral drugs. This will have a major impact on mortality rates, as can be seen in the graphs above.

Nevertheless, several key conclusions can be reached from projections.

Key conclusions – demographic impacts of HIV/AIDS on educators

- *Infection rates among educators can still grow* if prevention among educators and trainees is not effective.
- *Death rates could rise substantially over the decade and result in a cumulative loss of a high number of educators if ARV access is low.*
- *Death rates due to AIDS are unlikely to exceed 3 per 100 educators per year nationwide in the near future.* This level may be easy to overlook and is unlikely to destabilize the overall system, but is no cause for complacency.
- *ARV treatment can substantially lower the increase in death rates and cumulative loss of teachers.* ARVs can also narrow the range of uncertainty about AIDS death rates that has to be considered in planning.
- *Under ARVs scenarios, a rapidly expanding number of educators on chronic medication will accumulate.* Due to reduction in the number of people who die of AIDS each year, up to 3000 educators could be on ARV treatment by 2010. They will probably need systematic support to ensure good treatment outcomes.
- *Considerably higher (or lower) than average rates of death and illness may occur in many schools, circuits and regions, either in a given year or over time.*

3.5 Implications for Employees and education delivery

HIV/AIDS impacts on staff of most Namibian schools have been relatively limited so far, in line with the stage of the epidemic. Even in more affected regions, many schools have limited experience of death and illness among educators. As would be expected from projected death rates, a minority of surveyed schools (45) reported teacher deaths in the last 2 years. However, some schools had been quite heavily affected. The majority (73% of those who reported), reported only one death, 10 schools reported 2 deaths (22% of those who reported) and 1 school reported 5 deaths.

In the school survey, schools that had already experienced staff deaths tended to report more difficulties associated with death and illness of staff. In addition, rising death rates in families and communities were noted to be having indirect impacts on many staff in many field visits. Nevertheless, a difficulty in assessing impacts was that, while some managers and educators are deeply concerned by death and illness among staff and their families, others seem to be in denial or clearly have difficulty talking about the issues openly, particularly in relation to themselves or colleagues.

Region visits, the school survey and experience in other countries suggest a number of impacts of illness and deaths on schools.

- *Significant anxiety and stress* of infected and affected staff. This results from combinations of grief, extra workloads, stigma, fear of personal infection or illness, and care of family members. Some teachers and managers expressed despair and desperation at rising levels of illness and death, as well as the lack of information on what the MBESC is doing about HIV/AIDS and its impact on educators.³²
 - *Infected staff were noted to often face severe stress.* Stigma was reported to cause some infected teachers to stay away from work even when they were fit to teach. Alcohol abuse in response to stress by some infected staff had impacted on their wellbeing and performance.
 - A number of informants suggested that *female teachers bear a disproportionate burden* due to traditional caring responsibilities in their families, and concerns about their HIV infection risk due to limited ability to influence partners' sexual practices.

Table 3.3 Stresses faced by infected and affected employees

Infected Staff Members	
» Medical costs » Post Retirement Financial Distress	Economic Impacts
» Stress of chronic terminal illness » Fear of losing employment » Stigma » Concern about children and dependents	Psychosocial Impacts
Affected Staff Members	
» Care and support of relatives » Funerals- family and colleagues	Economic Impacts
» Loss of Partners » Trauma of bereavement » Extra school and family responsibility	Psychosocial Impacts

- *Higher levels of absenteeism.* Surveyed school heads reported rising trends in absenteeism for funerals (60% of heads in the north; 31% in south and central areas) but no clear trends emerged for absenteeism due to other causes. In Caprivi, 40% of heads cited funerals as the most common reason for absenteeism. However, the main reason cited overall by school heads for staff absenteeism was employee illness (55%), followed by funeral attendance (23%). Around 3% of staff were reported to have taken more than 15 days sick leave in 2001 (range 0-40% between schools) with slightly higher levels in the north.
- *Poorer quality of teaching by chronically ill teachers.* A number of reports of teachers who continued to try to teach even when they were debilitated were encountered. Informants noted that some teachers perform poorly for more than a year before they die.
- *Loss of skilled teachers and complications in staff replacement, allocation and distribution.*
 - Lack of qualified teachers was frequently cited as a problem independent of HIV/AIDS.
 - Replacement of teachers was widely seen as a problem. Heads reported that it took an average of around 3 months, but went up to one year to fill vacant posts. Particular difficulties in replacing skilled teachers were noted in remoter areas and for certain subjects such as mathematics and science. Northern schools appear more vulnerable to loss of staff: 30% of surveyed schools in the North had at least two vacant posts.
- *Greater complications of inadequate relief teacher system.* Most schools have difficulty funding relief teachers, as their Boards cannot afford to pay for them. Heads reported that when a teacher is absent learners are most often attended to in their class by another teacher (46%), but in 34% of them reported that they join another class. Around 14% of coping mechanisms included

³² At school level, very few educators were aware of RACE and RACOC and few were involved in AIDS activities, increasing their sense of isolation.

supervision by older learners, community members and support staff, or children staying in classrooms on their own.

Many informants suggested that these factors have significant impact on system function and quality of education. Many students, teachers and managers indicated that continuity of learning was disrupted. Seventy two percent of heads reported that staff absenteeism was a serious problem or sometimes a problem to the quality of education at the school. Absenteeism was considered a serious problem more in the north (43% of heads), and particularly Caprivi (60%), than in the south/central areas (23%). Twenty one percent of surveyed learners reported that they had had no teacher in at least one subject for four or more days in the preceding two weeks. Some learners indicated that they were traumatized by illness and loss of their teachers. Certain managers reported that psychological stress of infected and affected staff reduced their concentration and teaching effort.

3.5.1 Education management and administration

Namibia is relatively vulnerable to loss or absence of skilled managers and administrators as the number and skills of managers are in short supply. Difficulties filling posts for school heads and HODs were frequently noted, and 8% of surveyed schools already had no school head.

Impacts of illness and death on management and administrative functions were not frequently reported.³³ Clerical staff and institution workers were noted by some informants to be relatively easy to replace when necessary and their illness and deaths seemed to have limited impact on service function, although they could be traumatic and stressful on a human level.

However, in several instances significant effects were noted. In these cases the impact of infected or affected employees is having a severely disruptive effect:

- Several Circuit and regional managers complained that they had much less time for strategic planning, working on academic issues and skills building because of the demands of finding replacements for teachers who were ill or had died, as well as demands placed on them for identifying funds for destitute children.
- Community complaints about absent principals had been experienced in some Northern circuits.
- In adult education, deaths of district staff had led to loss of several weeks of promoter training and illness was noted to lead to fluctuating ability to work.
- In one post graduate programme for senior regional officials it was noted that mortality due to illness in 2000 had been high at 6-7% (2 of 32) in postgraduate programme in the last year, suggesting significant potential for loss of management and leadership capacity.
- Some programme managers noted that illness and death of key individuals in institutions had significantly set back plans to develop new programmes and initiatives. A manager remarked *“There were big gaps as new people came on board. It was different to a transfer or retirement as the people were often absent and withdrew from activities for many months before they died”*.
- Senior and specialist posts were noted to often take as long as a year to fill.

3.5.2 Vulnerable schools, workplaces and work processes

In discussions, several types of workplaces and work processes were noted to be particularly vulnerable to effects of illness, death or other absenteeism of staff. These included the following:

- Remote areas and schools
- Poor communities /disadvantaged schools
- Small schools
- Multiple sick staff

³³ In countries with more advanced epidemics lower levels of illness and death among management staff have also been noted. This seems in large part to be due to their older average age.

- Key positions, including Maths and Science teachers, School Heads, EO's and Inspectors
- Limited teaching and management capabilities
- Inflexible work processes that are highly dependent on key staff
- Low morale and organisational culture that makes other staff less innovative or willing to respond to problems.

3.6 Response analysis and ability to protect education quality

3.6.1 HIV/AIDS policy and programmes

The National Code on HIV/AIDS in employment covers the public sector but there have been difficulties in implementation of the code in the public sector.³⁴ Within the public service, the MHSS has taken the lead around HIV/AIDS and has called on all Ministries to promote HIV/AIDS awareness. The Office of the Prime Minister (OPM), which usually takes the lead on public service workplace issues, has liaised with the MOH around AIDS awareness programmes but has had little systematic focus on HIV/AIDS situation analysis and response development in other areas of HIV/AIDS impact. There is however a growing recognition in OPM that *"Awareness campaigns are not enough any more"*.

The education HIV/AIDS Strategic Plan has components providing for development of an HIV/AIDS policy; information, curriculum development and training for all education staff on all aspects of HIV/AIDS; and counselling services for staff. However, implementation has been slower than anticipated and early drafts of the Plan have not addressed all relevant workplace issues. In addition, apart from these important components of a response, there is no explicit intention to develop an overall workplace HIV/AIDS programme that covers all areas of relevance that are discussed below.

Recommendations – HIV/AIDS workplace policy and programmes

- *Consolidate an education sector workplace policy or and a workplace programme* to provide an overarching framework for action. These should cover objectives in the current HIV/AIDS Strategy as well as new issues raised in subsequent sections of this report. The framework should identify roles of various players in the sector and outside it (eg in OPM and Finance) and establish phased timeframes that make the agenda manageable.
- *Ensure active partnership with unions and professional associations* to ensure effective implementation and overcome previous resistance.
- *Use caution in cascade approaches to training* which are incorporated in the current strategic plan. Cascade approaches have often proved unsuccessful in many arenas.
- *Look at innovative ways to support institutions* e.g. clusters or inter-sectoral partnerships to share scarce resources.
- *Encourage and facilitate access to Voluntary Counselling and Testing* to reinforce prevention and impact management as part of the by education sector programme. However, VCT should ideally be promoted in the context of clearly defined broader policy and support responses so that employees know they can benefit from knowing their status.

³⁴ Inspectors are supposed to enforce best practice in the private sector but problems, particularly around union involvement have been noted there too.

3.6.2 Prevention Programmes

No prevention programme has been targeted at education employees per se. However, there is an intention to develop a life skills/ HIV/AIDS education programme aiming at 100% coverage of all educators. The school survey indicated only 28% of schools had an HIV prevention programme or similar initiatives for staff. Despite this, 65% of heads rated staff knowledge about HIV as excellent or good.

Most heads (62%) reported that condoms were easily available for staff, usually from nearby shops. There were very few schools where condoms were made available to educators. This is a serious shortcoming, as most workplace programmes recommend that condoms should be available at the site of employment.

“Information in textbooks isn’t enough, our teachers need to know where to get more knowledge about living with HIV/AIDS in their homes” Educator, Windhoek

In *teacher training colleges* prevention programmes have been initiated for all students. However the impact has not been assessed. There were several widely stated concerns:

- Knowledge was not translating into behaviour change
- Effective use of materials was uncertain. *“The materials are there and included in the curriculum but we doubt that they are being used effectively in actual training situations (Curriculum developer)”*.
- Training college staff had limited skills in dealing with HIV/AIDS issues and approaches³⁵. Professional role modeling by training college educators was noted to be weak or limited.
- Professional ethics and related issues such as role modeling and rights of children were not adequately integrated into training in practice although they were formally part of curricula.

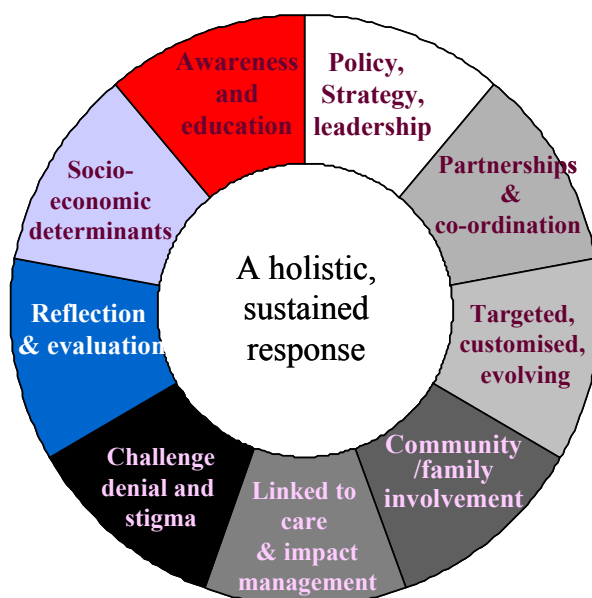
Recommendations – Staff and trainee prevention programmes

Prevention, particularly among trainees, is likely to be one of the most cost-effective approaches to HIV/AIDS over the longer term, particularly as large numbers of staff become infected before they join the teaching service.

- *Reinforce the strategy* to develop an effective HIV prevention and life skills programme for all educators, trainees, and other staff. The goal should be 100% coverage within as short a time as possible. Major spin-off benefits for learner prevention and support are likely.
- *Programmes should be holistic* and build on a clear understanding of critical success factors for workplace prevention programmes. They should reinforce basic knowledge about HIV/AIDS risk and its impacts, address life skills to empower staff to protect themselves from infection in their own relationships, and deal with issues such as stigma, living positively with HIV/AIDS, care and support. They should also include skills related to management of HIV/AIDS impacts on staff and learners. Figure 3.7 displays the components of an holistic workplace HIV prevention programme, based on previous experience in other workplaces.
- *Structural risk factors related to employment should be addressed as far as possible*. These include quality of accommodation and work away from spouse or other regular partners.
- *Teacher training colleges* have a large responsibility in prevention HIV infection among trainees, and should be assisted to introduce prevention programmes into their curricula.
- *Ensure effective access to condoms*, particularly for teacher trainees.

³⁵ Some commentators noted that this was related to broader difficulties of many trainers in adapting to new approaches and issues

Figure 3.7. Components Of Effective Workplace Prevention Programmes



3.6.3 Wellness, employee assistance and counselling programmes

The current education HIV/AIDS Strategy identifies counselling as a priority area, as well as information sharing between managers to enable them to manage workplace HIV/AIDS issues more effectively. Responsibility for programme development falls mainly on Special Education. The programme integrates counselling in relation to staff and learners within the programme. There is no clear emphasis on networking with other sectors (government or NGO/CBO) to build capacity and accessibility of counselling support.

Within the Public Service, Employee Assistance Programmes (EAPs) and some counselling services do exist. Concerns were raised about employees awareness, trust and stigma and the overall effectiveness of existing EAPs. Some managers expressed the view that employees should be aware that they can contact NANASO at any time for assistance.

Recommendations – Wellness and counselling

The Education sector counselling programme was still at an early stage during this study. However fieldwork and experience in other locations indicates that the following recommendations are appropriate.

- *Consider expanding the focus of the programme from psychological counselling to deal with other pressing issues for infected and affected staff* such as advice in relation to pensions, medical aid, and employment issues such as transfers, life planning etc.
- *Consider options such as a help-line to provide aspects of counselling support.* This could involve alliances or building on learning from services such as Child Lines and crisis lines in the region.

- *Ensure that programme design allows for confidentiality and anonymity.* Any reliance on peer counselling or accessing programmes at school and even cluster level is risky as staff may not wish to disclose HIV/AIDS to counselors within their workplace or close by.
- *Consider alliances with other Ministries, Local Government, NGOs (eg through NANASO), Unions and possibly the private sector* to ensure adequate, accessible capacity and efficient use of resources to meet needs in all parts of the country. Programmes involving external players must include systems for liaison and guideline development with personnel administration and other management in the Ministries, as well as PSEMAS and GIPF, to facilitate ability to address employment and life planning issues.
- *Disseminate information* on available resources

3.6.4 Medical Care

Medical care for education sector employees has new importance due to the increased burden of disease created by HIV/AIDS.

- Basic health care can have a large impact on well-being, morale and performance of employees with HIV/AIDS.³⁶
- Access to ARV treatment, which may be possible on a large scale under medical aid entitlements, will have a major impact on ability to manage impacts on individuals and loss of staff and skills.
- Health care for HIV/AIDS has large potential cost implications.

The following sections focus on the private sector medical aid cover provided by the Public Service Employees Medical Aid Scheme (PSEMAS). However, systematic coordination between education and public sector health services is likely to be increasingly important. Effective management of illness among staff not on medical aid is needed, and public sector services are relied on by medical aid members in areas where there is limited private sector capacity.³⁷

All public servants are entitled to join PSEMAS.³⁸ Although no statistics were available of the proportion of education sector employees on medical aid, participation is high. In 2001 there were around 120 000 members and dependents covered by the scheme. Cost barriers to joining the medical aid are low: principal members contribute \$60 per month and \$30 per month for each dependent. Government funds 95% of contributions out of general government revenue. Members are required to make co-payments of only 5% of the cost of consultations.

Benefits to PSEMAS members are generous and cover a wide range of HIV/AIDS-related care. There are no financial limits on claims or medications, and only a small number of services, specified in Public Service Staff Rules, that are excluded from cover. There are no exclusions or limits specific to HIV/AIDS. The scheme also pays for transport in cases that are referred to major centres.

Overall, under current conditions, there are relatively few barriers to education staff with HIV/AIDS accessing PSEMAS benefits, even if they only join once they realize that they have HIV/AIDS.

Key challenges

Among important pre-existing challenges to the role of PSEMAS are the following:

³⁶ Basic interventions include primary health care for early and effective treatment of TB and other opportunistic infections, certain basic prevention treatments and psychological or nutritional support.

³⁷ Outside of Windhoek, most hospital care and other key services are provided by public sector hospitals and services such as Namibia Institute of Pathology.

³⁸ Membership used to be compulsory.

- *Cost escalation.* Over the last three years, costs have persistently risen above expected levels and there are concerns about sustainability. This was a major reason for a review of medical aid strategy since April 2001. One cost driver has been rapidly increasing membership.³⁹ Overall, however, the scheme reports cost escalation that is lower than experienced in medical aid systems in South Africa. To a significant extent this seems to be due to limited access to private medical care. Claims by members in more remote areas tend to be lower than for urban counterparts.
- *Active management of costs, effectiveness and fraud.* This is hampered by several factors.
 - *Legal and regulatory restrictions on ability to manage care and costs or “interfere” in treatment decisions* by patients and providers. In terms of the Act and Public Service Staff Rules the scheme has no effective power to intervene in treatment decisions by members or doctors, even if these are grossly wasteful.⁴⁰ Some initiatives such as generic drug substitution are being promoted, but there is no active pharmaceutical benefit management programme or other managed care.
 - *Difficulties in preventing membership card “sharing”* with non-members, a practice which is thought to be widespread.
 - *Limited incentives and requirements for the scheme administrators to invest in systems to enhance monitoring and management of care.* Apart from legislative constraints, current contracts with administrators are of quite short duration, so extensive investment in developing new systems is risky for the administrators, who may not benefit from the investment.
- *Feasibility of service delivery particularly in rural areas,* especially for more sophisticated services, is a problem due to limited private (and public) sector capacity.

HIV/AIDS impacts and implications

AIDS adds complexity to challenges already faced by the scheme and its members. Potential for the HIV/AIDS epidemic to increase costs is substantial. HIV/AIDS is also a complex disease with rapidly changing treatments. Many doctors often do not keep up with best practice developments, and the effectiveness and cost effectiveness of their treatment cannot be assumed without active guidance and support. In addition, ARV treatment and other aspects of HIV/AIDS management often require quite sophisticated laboratory and other diagnostic services.

The medical scheme is already identifying important trends that are, or are thought to be, HIV/AIDS related. These include:

- *Increasing membership,* with indications that some of this is due to new people joining the scheme when they realize that they or dependents have HIV/AIDS.
- *Increasing costs and use of HIV/AIDS related services.* The scheme estimated that in 2000 15% of costs of chronic medication were HIV related and that HIV/AIDS related costs had increased by 20-30% over the year.⁴¹ Antiretroviral use had been noted to be highest in north eastern regions.
- Large numbers of claims for *HIV-infected infants*, often associated with “high cost families” where more than one member has large health care needs.

Medical aid costs are likely to be the single largest HIV/AIDS related cost. However, ARVs seem to be a potentially affordable component of HIV/AIDS strategy for the education system. Projections of ARV costs are subject to many assumptions, particularly around drug prices. They suggest however, that by 2010, an efficient programme could add the equivalent of NS\$ 28 million to the annual cost of

³⁹ The number of beneficiaries increased from 110 000 to 120 000 between 2000 and 2001.

⁴⁰ A recent initiative was to identify and track high claiming beneficiaries but the scheme had no power to intervene to manage their care and costs.

⁴¹ The scheme attempts to identify HIV/AIDS related utilisation through tracking certain medication and services that tend to be characteristic of HIV/AIDS treatment. This may well not pick up all cases.

employment for teachers, equivalent to around 2% of expenditure on primary and secondary education (Table 3.4).⁴² Cumulative costs between 2002 and 2010 would be of the order of N\$146 million.

Table 3.4. Potential costs of ARV therapy for educators

	No of employees on ARVs	Total costs*	ARV treatment as a % of total MBESC basic salaries
2001	400	\$5.6 million	0.25
2005	1400	\$12.9 million	0.9
2010	3020	\$28 million	1.9

* N\$ at constant 2001 prices. Note actual 2001 prices would be higher due to current drug prices and cover of dependents. PSEMAS data suggested expenditure of N\$ 15 million on chronic AIDS medication in 2000.

Recommendations – medical care

Successful and affordable medical cover, particularly for ARVs, is likely to be a critical component of education sector HIV/AIDS strategy. A lead role by the education Ministries in promoting effective strategy seems appropriate. They are the largest employing sector and their employees are relatively skilled and affluent, with good prospects of successful therapy. Widespread ARV access may be a critical part of strategy to sustain the skills base for education delivery (see discussion of skills impacts in a subsequent section). However, the education sector and other sectoral partners have not so far given systematic attention to this issue. The following recommendations should be considered.

- *Develop a strategy on medical aid with MOHSS, Finance, OPM and other Ministries.* Particular issues to be addressed include:
 - *The legislative and regulatory framework*, to reduce constraints on ability to manage care and costs.
 - *Implementing disease management programmes for people with high claims.* This may include not only people with HIV/AIDS, but also other chronic, high cost conditions and high cost acute conditions.
 - *Options for cost sharing, including increasing member contributions and possibly co-payments on certain services* to assist in covering extra costs of HIV/AIDS. Particularly for higher income members, contribution rates are very low and increased contributions may be possible.
 - *Options for bulk purchasing of ARVs* to ensure that they are affordable.
 - *Strategy to increase access to effective care particularly in remoter areas.*
 - *Potential need to fast track effective ARV care strategy for key cadres of skilled human resources in Namibia*, such as educators.
- *Set up routine reporting systems with PSEMAS to provide statistical information on the numbers of education employees within various categories that are on HIV/AIDS and ARV treatments.*⁴³
- *Work with PSEMAS to increase education employees and managers awareness of the importance and potential of HIV/AIDS care.* Stress the importance of early diagnosis of HIV status, treatment compliance and ARV therapy.

⁴² This assumes a cost of N\$ 9200 for ARVs and monitoring per patient per annum and 85% uptake. This level of pricing seems achievable as it has been negotiated by countries such as Botswana. However, current private sector prices of ARV drugs in Namibia remain higher than this at around \$ 19 200 although they have fallen substantially from \$45 600 per annum. Note also that costs continue to rise after 2010 in the absence of behaviour change, lower prices or new technology.

⁴³ At present, PSEMAS systems do not allow for routine identification of members employing Ministry or their job categories, or categorisation by age and gender, but this should be relatively simple to rectify.

- *Encourage direct liaison with health care providers by education managers at Region and lower levels* to ensure that systems enable effective access of staff to HIV/AIDS care and to facilitate workplace management of illness and absenteeism. Due respect of confidentiality in specific cases should clearly be observed.
- *Create workplace environments and policies that facilitate effective compliance particularly for staff on ARV and TB treatment.* Consider issues such as supervised directly observed daily treatment of staff for TB and ARVs in workplaces where appropriate.

3.6.5 Pension Fund

All full time public sector employees are members of the Government Institutions Pension Fund (GIPF). Employee contributions are equivalent to 7% of employee salary, with the employer contributing the equivalent of 16% of salary.⁴⁴ The fund is a defined benefit scheme, which pays out specified benefits related to final salary and years of service.⁴⁵ Government is obliged to pay any further costs that might arise from increasing claims on benefits.

The object of the fund is to provide retirement and ancillary benefits for the beneficiaries, thus guidance on how to weight affordability to the employer, and social issues related to well being of employees and dependents is limited. The trustees of the fund, who decide on individual entitlements as well as policy are representative of the employer, organized labour, employees and pensioners.

The GIPF has several important features relevant to HIV/AIDS.

- *Medical examination of new members may be required by the fund.* Restricted benefits may apply to people who join and are found to not be in good health, or if a member failed to disclose material health problems. Current rules do not clearly define how this is interpreted in cases of HIV infection.
- *Ill health retirement* is granted if the employee is too ill to work. The pension is calculated similarly to normal retirement pensions ie 2,4 percent of the member's final salary, multiplied by the member's term of pensionable service.⁴⁶ A gratuity of 3,69 times the annuity is also provided for.
- *Disability income benefits* for people disabled by illness or disease are 75% of the member's pensionable emoluments at date of disablement, but fall to 50% after 24 months and can be reduced to the equivalent of a normal pension if the person is later found to no longer be disabled.
- *Death in service benefits* are a lump sum equal to twice the member's pensionable emoluments; plus a spouse's pension equal to 40% of the members' pensionable emoluments immediately before his/her death, plus a pension of 10% of the members pension entitlement at time of death for each surviving child up to a maximum of 30%. Death benefits for members who are on disability benefits are the same as those for death in service.
- *Death in retirement* pensions to spouses remains the equivalent of the member's pension up to 60 months after the retirement after which it falls to 50% of the pension. Pensions for qualifying children are generally constant but can be adjusted after death of the employees spouse.
- *Funeral benefits* of \$ 5000 for members and spouses and less for children are provided.

⁴⁴ This was recently reduced from 21% of salary.

⁴⁵ A defined contribution fund pays members what they have contributed plus returns on investment and the employer's liability is limited. Discussions about converting the GIPF to a defined contribution have been held but conversion is currently thought to be too difficult to communicate to members.

⁴⁶ However, the benefit is somewhat more generous as it is increased by the lowest figure of: one-third of the period of his/her Pensionable service; the period between the date on which he/she so retires and the date on which he/she will attain normal retirement age, or five years.

- *An employee who is absent with permission on full or lower salary qualifies for full death, funeral or disability benefits based on previous salary for up to 36 months after the commencement of absence.*
- *The definition of members' dependents is quite broad.* It included those who are de facto dependent (eg potentially orphans legally adopted by the member, step children or common law spouses) and there is some flexibility about support of children over 18 but under 25.⁴⁷
- *Lump sum payment of one third of ill health retirement and death benefit pensions can be provided on request of the member or spouses to meet urgent financial needs.*
- *Loans to members can be made at discretion of the trustees.* Liabilities for housing loans or other guarantees can be deducted from member benefits on retirement or death.

Implications of HIV/AIDS

The current benefit structure and system are designed mainly to serve members who retire at the normal retirement age of 60. HIV/AIDS has fundamentally changed the profile of employees requiring assistance from the fund. Far greater numbers now are young, with short service and often with young dependents. In addition, their spouse and/or children may also be infected, with extra implications for financial needs.

Other important issues raised by AIDS for the pension fund are how to balance:

- *Financial sustainability*
- *Needs of members with HIV/AIDS as well as other members*
- *Needs for efficient management of ill health to maintain efficient public service function* and avoid unnecessary suffering of ill employees and their dependents. If ill health retirement occurs too early, it can result in premature loss of skills and loss of financial and psychological benefits of work to the member. If it occurs too late, the employee may face unnecessary stress when ill and the Ministry may incur extra costs or inefficiencies due to poor performance of the ill person.
- *Broader social impacts of benefit structure and fund efficiency.* As the education sector is Namibia's largest single employer, "adequacy" of ill-health retirement benefits and death benefits to dependants have important societal implications.

Several specific issues should be pursued with GIPF and other partners

- *The ill health and disability retirement system is generally considered to be inefficient for several main reasons:*
 - *The ill health retirement pension is small* especially for employees with short service. It is often difficult to meet health care costs from ill health pensions. Sick employees therefore have incentive to keep working as long as possible, even if they are incapacitated.
 - *Death in service benefits create financial incentives to die in service rather than take ill health retirement and die in retirement,* particularly for younger employees with shorter service.
 - *There is no formal disability management system* to ensure that employees are not discharged from service too early or too late.⁴⁸ Disability management is particularly important because HIV/AIDS has a fluctuating course and it may be difficult to assess when someone is permanently disabled. Disability management is likely to be increasingly important if increasing numbers of employees can ARVs, which can result in them regaining function even if they are ill for some time initially, due to the disease or early side effects of treatment.

⁴⁷ However, a child adopted after the member is on pension (eg by a grandparent) is not clearly covered. This type of situation may be increasingly common.

⁴⁸ Abuse of ill health retirement is considered to be an ongoing problem. Boarding is recommended by the Trustees on the advice of medical Boards who sometimes provide or have limited information on the status of a sick employee and whether they could recover function.

- *Inefficiencies in submitting claim forms* etc by personnel officers, other managers and doctors can delay processing of retirement applications.
- *Inconsistencies between the ill health retirement and disability pensions* create confusion and employees may be disadvantaged if they apply for the inappropriate benefit.⁴⁹ Most members with HIV/AIDS are reportedly granted ill health retirement rather than more generous disability payments. The problems of lack of clear strategy and understanding right down the school level are illustrated by one comment from a GIPF official:

"I recently had a public servant with HIV come to me in tears. He had HIV and knew he was going to die, but had no wife or children. He had been given ill health retirement but did not have enough money for health and other needs from his pension. He should rather have resigned to get a lump sum payout for his last months or been given disability retirement which has a higher pension. His employer should never have recommended ill health retirement as the best option.
(GIPF official)

- *Employees who are deemed to be disabled by a disease that existed at the time of their employment* may not qualify for disability benefits. How this is interpreted in the case of employees who may have had HIV at the time of enrollment is not clear, but it could potentially be discriminatory.
- *Payouts to surviving dependents can be inefficient.* In particular, proof of identity and entitlement to dependent's benefits has to be provided by beneficiaries. There can be delays of up to a year if employees not have up to date beneficiary nomination forms.
- *Re-hiring of employees who were disabled, retired for ill health or retired at normal retirement age is difficult.* Post retirement, they do not qualify for further pension benefits.

Cost implications

A full actuarial assessment of future costs and sustainability in view of HIV/AIDS has not been performed by GIPF. The fund has a reserve for HIV/AIDS claims. However, GIPF considers that fund costs seem unlikely to increase substantially due to HIV/AIDS. This is, broadly, because current benefit structures mean that earlier payments for illness and death of staff are offset by reduced payments for pensions in future. However, it is anticipated that there may be cash-flow implications for the fund in the short term due to higher claims.

Recommendations – pension benefits and processes

The fundamental change in the profile of employees requiring support from GIPF warrants a thorough review of the fund and benefits. The need for review is emphasized by widespread reports that inefficient ill health retirement is a major obstacle to replacing sick teachers at appropriate times.

- *Promote and participate actively in review of pension benefits.* Ensure particular attention to:
 - *Removing disincentives to retire when ill.* One option may be for employees to be paid full salary for 3-6 months after ill health or disability retirement. This may well have limited financial implications for the fund but could assist in reducing stress to ill employees and reducing impacts on education delivery due to delayed application for benefits. An alternative may be to grant disability pensions, rather than ill health retirement (with its lower entitlement) to most employees with late stage HIV/AIDS.
 - *Resolving inconsistencies and confusion between ill health and disability benefits.*

⁴⁹ The fund is currently assessing whether ill health and disability benefit distinction should change.

- *Try to ensure that ill health and disability benefits are sufficient to cover reasonable standards of medical care.*
- *Support development of a formal Disability Management system and/or streamlined Boarding.* More efficient medical assessment/Boarding system is critical to protect employee well being and education system function against delays, abuse or unnecessarily early retirement.
- *Actively support disseminated of GIPF information to members.* Ensure that they understand benefit entitlements and options, and that *beneficiary details* and documentation are up to date to facilitate rapid claims.
- *Support training of personnel officers and other managers* so that they can advise or appropriately refer staff who need to plan around ill health and disability.
- *Increase flexibility and incentives to make it easier for retired or disabled staff to return to service if they become fit to do so.* This will make it easier to maintain the skills base, and reduce psychological barriers to Boarding which is seen as “the end of the road” for many ill staff who therefore avoid it.
- *Monitor the approach to members with AIDS who may have been HIV infected at the time of first employment.* Ensure that equitable and affordable benefits are given and that rights are not violated.
- *Encourage the GIPF to improve information available to the Ministries.* Key information includes; a full actuarial assessment of HIV/AIDS impacts on the fund; more active tracking of HIV/AIDS and other trends around ill health and death; and efficiency of application processes.

3.6.6 Housing benefits

In Namibia, budgetary constraints and differing levels of poverty in the country has meant that the availability of adequate accommodation for staff in many schools has been limited, particularly at primary and combined school level. In many communities there is dependence on the community to assist in providing reasonable accommodation. In addition to direct provision of housing, *housing loan guarantees* are provided to employees by government.⁵⁰ Provision is made for these to be repaid from the pension entitlements of employees in the event of their death or incapacity. The epidemic raises several potentially important issues for housing benefits in the form of direct provision or loans:

- *Housing influences HIV infection risk.* Separation of spouses is more likely when reasonable accommodation is not available, increasing HIV infection risk. Stable housing and home ownership have been associated with lower HIV infection rates in some studies. (see eg Williams et al. 1999)⁵¹
- *Housing has a role in managing impacts of HIV/AIDS among staff and learners.*
 - *Housing is an important incentive to facilitate replacing staff,* particularly in remoter areas.
 - *Subsidised housing in urban areas may come under increasing pressure.* Significant numbers of ill employees tend to seek transfer to urban areas with access to better medical care.
 - *Housing has an influence on overall morale among educators.*
 - *Tensions can arise* if ill educators occupy scarce housing or have to share with colleagues.
 - *Staff are less likely to live in the communities around their schools,* limiting their ability to engage with them on OVC support and prevention issues if they have poor local accommodation.⁵²
- *Housing benefit arrangements may create vulnerabilities for the employer and employees.* Housing loan guarantees or other financing can create liabilities for government and employees’ households. Loans are quite long term, and beneficiaries may become unable to pay them off if

⁵⁰ No data was available to assess the number or value of education sector staff guarantees.

⁵¹ Causal relationships are not completely clear but there appear to be an association that may be important in longer term national strategy in terms of the overall epidemic.

⁵² In a number of instances it was noted that teachers in schools within 50-100km of larger centres tended to commute daily rather than staying in the village.

they become ill or die, or face extra costs when family members become sick or die. Government and dependents may face costs after an employee has died.⁵³

- *HIV-Infected employees may have difficulties obtaining housing finance from commercial lenders.* Some lenders may require life insurance to grant bonds, and life cover for people with HIV may be restricted.

Recommendations – housing benefits

- *Consider housing provision as an important issue* in preventing and managing HIV/AIDS impacts on staff and system function. This adds to the existing need for adequate housing particularly in remote areas, but also potentially for urban center accommodation.
- *Review and monitor the exposure of government, employees and their dependents to HIV/AIDS impacts on the housing loan guarantee scheme.* It is possible that impacts may be significant.

3.6.7 Ill health and absenteeism management

Absenteeism due to ill health, funeral attendance and other compassionate reasons is clearly a major obstacle to quality of education in Namibian schools. Not all of this absenteeism can be ascribed to HIV/AIDS, but the epidemic seems to be making the problem worse and makes effective management of absenteeism more urgent. In terms of the Public Service Act, incapacitated or continuously ill employees can be discharged from service but the desirability and feasibility of resort to this provision to manage ill health in most cases is doubtful.

At present, absenteeism and ill health appear to be largely unmanaged in many schools and institutions. In surveyed schools, 98% of Heads reported that absenteeism was recorded, and 96% said that the information obtained was used in some way. However, interviews school and circuit managers indicated that many individuals were absent from their positions for long periods without taking indefinite sick leave. Some circuit managers reported that educators who were not on indefinite sick leave had not collected their salaries from them for several months because they were too sick to do so and could not send anyone in their place.

“Our principals are telling us that they are desperate about how to deal with illness among staff”
(Senior MBESC Official)

Important reasons for ineffective management include:

- *Managers lack of confidence in dealing with the complex human issues* of enforcing regulations around sick and compassionate leave. Some regional managers said that heads feared antagonism and even bewitchment by staff if illness and absenteeism was reported to higher levels.
- *Lack of openness and resistance of sick staff to medical Boarding.* Staff members often see Boarding as a confirmation that they have no hope of recovery, and resist losing psychological benefits of work, and the financial hardships after Boarding.
- *Inefficiencies of systems to for medical Boarding of ill staff.* One RACE member commented: *“The Ministry rarely effects recommendations for indefinite sick leave or dismissal on the basis of illness because the process is bureaucratic, and requires sign off from the Permanent Secretary, two doctors and a number of other bodies. This can drag on for more than year.”*

⁵³ The degree of government exposure, and implications for beneficiaries and their dependents, depend on conditions of repayment in the event of death or default. Financial risk depends on eg whether beneficiaries have life assurance, are required to pay off loans from pension entitlements or properties can be sold to enforce repayment. Even if government's financial risk is limited by potential to claim from the person's pension or to sell off a house to repay them, but financial and other stresses on dependents remain a concern.

- *Large sick leave entitlements.* Managers indicated that under current entitlements, combined with delays in Boarding, the average employee in many areas is effectively entitled to a year or more of sick leave.
- *Lack of guidelines for managing funeral and other compassionate leave at school level.*

Recommendations – ill health and absenteeism management

Active management of ill health and other causes of absenteeism are already seen as an important priority to protect education quality. Improved management requires a coordinated, holistic response that deals with a number of issues, including the following.

- *Review sick and compassionate leave entitlements.*⁵⁴
 - *Strongly consider reducing routine sick leave entitlements* to ensure that an employee's health status is confronted and active management of ill health absenteeism begins before negative impacts on learning and affected individuals. Granting of further special sick or disability leave should be possible after assessment, with further structured review. It is important to ensure that ill employees can continue to teach if they recover and are not permanently incapacitated.⁵⁵
 - *Consider review of entitlements, arrangements and practice for funeral attendance and other family matters.* Tighter regulations and guidelines around compassionate leave may be needed.⁵⁶
- *Strengthen supervision, support and tools for managers at all levels* to identify and assist in management of ill health and other absenteeism problems. School and other managers require training, guidelines and support that enable them to deal with emotional and other complexities of ill health management more effectively.
- *Ensure more timely ill-health retirement through more efficient medical boarding and ensuring appropriate pension benefits.* This will require coordination with the GIPF, MOF, OPM and MOHSS.

3.6.8 Cover for absent educators and relief teacher systems

Informal cover by colleagues for staff who are sick is seen as having major limitations in protecting learning processes and avoiding undue stress for colleagues when educators are absent temporarily permanently due to illness and death. Lack of an effective relief teacher system is widely seen as a major impediment to quality education provision. For some positions, regulations for acting appointments and acting allowances (of up to 6 months) are available to facilitate efficiency of cover for deceased colleagues but these mechanisms were not seen as providing an adequate solution in practice.

Several limitations of the current relief teacher situation were noted.

- *Lack of budgets.* Currently government does not pay for relief teachers except in the case of teachers taking maternity leave. In other cases, payment for relief teachers comes from School Boards but most Boards cannot afford to pay for them.
- *Limited quality of potential relief staff* in many areas, particularly but not only for specialist subjects and management positions.

⁵⁴ Current sick leave entitlements and practice are far in excess of the Labour Act (1992) minima of 30 working days in a three year cycle, and 24 consecutive days of normal vacation leave.

⁵⁵ Recent reforms to public service sick leave entitlements in South Africa restrict sick leave to 30 days in a three year cycle but make provision for special disability sick leave which involves active assessment, planning and management.

⁵⁶ In several countries with more advanced HIV/AIDS epidemics traditional norms around funeral attendance policies have had to be altered to preserve functions of government departments.

- *Disrupted learning due to delays in appointing relief teachers* even when they were available in some instances.

Potential costs of relief teachers

If relief teachers cover all absenteeism due to AIDS illness among staff, estimates suggest that the cost would be unlikely to exceed the equivalent of 1.1% and 1.7% of teacher payroll in 2005 and 2010 respectively, even under a non-ARV scenario.⁵⁷

Recommendations- cover for absent staff

Costs of a well-managed relief teacher systems targeted at AIDS illness and schools in greatest need, seem potentially affordable if the system is introduced gradually with reallocation of finance from other areas. However, particularly given current budget constraints this would require careful planning and management to ensure affordability and effectiveness. In addition, other mechanisms to ensure effective cover are likely to be needed in addition to relief systems.

- *Develop budgetary and management systems for systematic, affordable provision of relief teachers.* Important aspects of the system are likely to include:
 - *Budgets at appropriate levels of the system* to ensure funds for relief teachers are held at levels that spread them across large enough pools of schools.⁵⁸
 - *Effective prioritisation of relief staff use, targeting of the most vulnerable schools or classes and effective monitoring* to limit cost escalation and abuse or use in non-urgent situations.
 - *Considering use of National Youth Service Volunteers* to form a relatively affordable relief teacher corps, and consider integration of such service with college entry or selection criteria.
- *Consider use of suitable community members* as teaching aids, class supervisors or teachers to cover for absent staff and maintain basic learning processes in areas with limited potential for trained educator cover.
- *Consider ways to enhance skills, capacity and performance of relief teachers.* These may include:
 - *Defining pools of accredited relief teachers* (including National Service volunteers and possibly teaching assistants) who are reasonably skilled, and assured of more regular employment or career advancement.
 - *Systems for in-service training, support and mentoring* of relief staff.
- *Consider other mechanisms to reduce service delivery impacts of absenteeism.* These may include:
 - *Supportive environments in schools and other workplaces* to enable HIV positive employees to keep managers informed about their health problems and allow for more effective planning to manage periods of absenteeism.
 - *Mechanisms to share available managerial, specialist education and other support capacity* more effectively within and between school clusters.
 - *Guidelines and systems for informal cover (or relief cover)* to ensure that covering staff are orientated and prepared to minimise disruption of learning processes.
 - *Multi-skilling, succession planning and teamwork.*⁵⁹ This may enhance flexibility in certain functions, including management and more specialised subject areas.
 - *Enhancing ability to deal with large or extra classes* through greater emphasis on large class and multi-grade teaching skills.

⁵⁷ This assumes that employees with AIDS are absent for an average of 120 days before death and cost the equivalent of the daily salary of the teachers they cover. Adequate data to estimate the scale of funeral related absenteeism, compassionate leave or implications of ARV treatment for absenteeism are not available.

⁵⁸ Some schools may have no urgent need for relief teachers in a given year while others may need relief for several teachers or for long periods. Budgets should thus be pooled, probably at Region level to allow for prioritisation, control of abuse and to enable certain needy schools to access relatively high levels of funding.

⁵⁹ This has value independent of HIV/AIDS impacts in promoting career and skills development of staff.

- *Innovations* such as teaching aids and distance learning techniques.⁶⁰
- *Initiate dialogue with unions and training institutions* to explore ways to increase ability to respond to more effectively to absenteeism and its impacts on learners and other educators.
- *Monitor utilisation, costs and effectiveness of systems* such as informal cover, acting appointments and use of relief staff to ensure effective and equitable systems and practice.
 - *Monitor and manage increased workload of employees who provide informal cover*, at institutional and system-wide levels.

3.6.9 Recruitment, appointments, transfers and deployment

Recruitment and appointment systems in the Public Service are generally recognised as being unwieldy. The public service requires extensive procedures to improve transparently in recruitment and appointment, but this also predispose to delays.⁶¹ Complaints of slow advertising and appointment processes were heard in schools, regions and particular programmes at Ministry levels. Surveyed school heads' estimates of time taken to fill vacant posts varied widely, from one to fourteen months, with a median of around 3 months for all posts, and up to 2 years in the case of teacher posts.

Inefficiencies appear to occur at all stages in processes from institution through to Ministry level and then in referrals of various matters to the OPM and other role players. A large part of the problem seems to be the large number of stages and players in the relatively centralised recruitment and appointment processes. This means that even when individual players attempt to increase efficiency they have limited impact on the overall process.⁶² Significant delays seem to often occur through inefficiencies at lower levels, and recent cluster initiatives have been noted to improve efficiency of lower level processes to avoid delays.

Transfers and redeployment are possible but are a sensitive issue as illustrated by recent initiatives to redeploy teachers from Katima Mulilo region, which has relatively high learner: educator ratios to other regions.

Equitable allocation of staff is already a major challenge to the Namibian education system. Recent revision of staffing norms has provoked some controversy, and available databases are manual or provide insufficient detail to track recent movements of staff and implications for equitable distribution of educators. Particular deployment problems arise when staff apply for more than one post simultaneously and fail to turn up at the last moment due to appointment elsewhere.

Implications of HIV/AIDS

HIV/AIDS can have several important implications in relation to appointment, transfer and deployment systems.

- *HIV/AIDS could substantially increase turnover and attrition rates and associated administrative burdens, delays and inefficiencies.* Rates of staff losses from all causes in surveyed schools were 7.5% per annum, with higher rates of 8.5% in northern regions.⁶³ A total 3% overall attrition rate

⁶⁰ It was noted that many learners already use NAMCOL materials in addition to what they receive at school. These materials are often well suited to situations where there is limited formal teaching capacity, and significant numbers of teachers are familiar with the materials through teaching for NAMCOL.

⁶¹ Part of the solution is seen as developing competency based, rather than qualifications based, job descriptions to assist in screening and planning training. Ministry managers are also being encouraged to write better job descriptions to facilitate selection.

⁶² For example, Personnel Administration indicated that their internal processes were quite reliable and efficient, and advertising processes are felt by OPM to be quite quick provided Ministries notify OPM efficiently.

⁶³ Attrition data were supplied by 116 schools with 1967 staff. Deaths accounted for one fifth of all attrition.

from the education system was reported by GIPF for 2000. In addition to turnover due to loss of staff, extra turnover can be expected when staff try to transfer to be closer to health services or to families to provide or get support. Projected death rates between 1.5 and 3.5% (ARV and no-ARV scenarios), could substantially increase complexities of the managing appointments and result in poorer education delivery in many institutions.

- *Costs of delays in replacement of staff are likely to be lower than for illness related absenteeism.* However, with reported average delays of 3 months in appointment of replacement staff to schools, this could add a further 50% to estimates of costs of absenteeism due to illness.⁶⁴
- *Transfers are likely to be more difficult to manage.* Some regions report many applications for transfers on the basis of ill health and some to enable staff to be closer to sick or affected family. Reported effects include:
 - Increased administrative burdens.
 - Conflict and complaints to unions due to the policy of only transferring when a vacant post is available, and in cases where transfers are enforced to deal with skills shortages in certain areas.
 - Complaints by school heads when staff who transfer in are too ill to perform their duties.
 Budgets for transfers where certain allowances have to be paid may also come under strain, although the overall additional cost at system level is likely to be small.
- *Staff deployment and staffing norms become more complex.*
 - In some regions it was noted that “overstaffing” in terms of norms could be misleading as some schools had several sick and under-performing educators simultaneously.⁶⁵
 - Loss of staff to HIV/AIDS, particularly in remoter and rural areas which have difficulty in attracting and retaining staff, adds a new complexity to achieving equitable distribution of capacity.
- *Discrimination or inefficiencies could occur in application of exclusions of people with HIV/AIDS from permanent appointment.*⁶⁶ It is uncertain how Public Service Act provisions are being applied in practice in cases of people with HIV. Exclusion of some people with HIV but with good prognoses (especially if they can access ARVs through employment) could be unfair and lead to unnecessary skills shortages. Failure to limit appointments of people who will progress rapidly to incapacity could undermine education quality and increase costs.

Recommendations – recruitment, appointment, transfers and deployment

- *Consider ways to streamline recruitment and appointment processes.* Options may include revitalizing plans for a computerised HR management system, enhanced training of line managers and personnel offices, and negotiating greater flexibility for local recruitment and transfers where functional benefits are clear to circuit and Regional managers.
- *Review and monitor deployment and transfer systems to ensure efficiency and fairness.* Specific issues for consideration include: specific challenges related to filling management posts and other key positions; managing transfer of staff who would more appropriately be boarded due to incapacity, perhaps through requiring more systematic medical review of transfer applicants; resolving problems of applicants for multiple posts who then fail to turn up in some locations; reviewing staffing norms to accommodate a certain percentage of staff with limited capacity due to ill health.

⁶⁴ These costs would not be financial, as a vacant post does not result in higher expenditure unless relief teachers are more expensive than permanent ones. However, the costs of vacant posts will manifest in poorer education quality, stress and morale problems.

⁶⁵ In some countries, concentration of sick educators in urban schools close to better health facilities has been noted.

⁶⁶ In terms of the Public Service Act, no person can be permanently appointed if they have a disease that is likely to interfere with their ability to perform their duties and candidates can be required to undergo a medical examination. Also, all new appointees are considered to be on probation.

- Consider issues such as housing and other incentives to ensure equitable distribution of teachers and streamline transfer and redeployment, particularly for rural and remote schools.
- Monitor application of exclusion of people with ill health from employment to assess whether practice is unfair or inefficient.

3.7 Skills losses and educator training requirements

HIV/AIDS is already exacerbating short term deficiencies of key skills at school and higher levels. In the longer term it threatens to create skills shortages as the number of losses of educators and other employees to HIV/AIDS accumulates. In addition to direct losses of skilled staff and trainees to AIDS, there may be indirect impacts on skills for several reasons.

- Other causes of attrition during training, between colleges and the service, or within the service may increase. For example, HIV/AIDS impacts on staff and learners may make teaching a less attractive career option or lead to trainee drop-out due to personal HIV/AIDS related stresses. Skills shortages in the broader Namibian or SADC economy may increase competition for teachers. Already, significant numbers of teacher graduates buy themselves out of bursary obligations and are sought after in other sectors.
- Many staff who are lost to AIDS are likely to have been strong candidates for future managerial and leadership positions due to their accumulated experience and skills.⁶⁷
- Mentorship and informal skills transfer could be disrupted by loss of more experienced managers and leaders.

There are a number of possible strategies to protect the skills base and avoid disruption and discontinuity if an educator, manager or other employee becomes ill or dies that are shown in the Box below (see also Flint Taylor 2001).

Potential strategies to protect the education sector skills base

- *Prevention programmes*, to avoid future skills loss.
- *Effective ARV treatments*, or even more basic treatments to sustain morale and productivity for as long as possible.
- *Training to replace lost skills*. This may include developing more efficient training systems.
- *Recruitment and enhanced retention*. This may include extending retirement ages, providing incentives to current and retired staff to remain in service, and expatriate recruitment.
- *Management of knowledge* that helps to keep the system functioning, and strengthening ways to disseminate this knowledge.⁶⁸
- *Changing work organisation*. Examples include: sharing capacity across clusters of schools; specific job redesign with redistribution of less skilled tasks to less skilled staff; teamwork; multi-skilling; and modifying systems to reduce the load of unproductive work, in order to increase overall efficiency and reduce need for as many skilled staff
- *Career development and succession planning*. This involves identifying and supporting staff with particular promise to develop and provide the relevant skills. Succession planning involves identifying a successor (or successors) to develop the skills to fill the role of a person who is identified as being ill or likely to leave.⁶⁹

⁶⁷ One senior inspector noted that most educator deaths occurred five or six years after graduation when they had accumulated significant experience.

⁶⁸ Mechanisms may, for example, include: skilled delegation to build experience; meetings, and use of cc email or memos to keep a team familiar with a broader range of issues than those with which they deal directly; and systems to ensure key documents and records are accessible. Optimal systems disseminate not only information but also the "softer" skills and knowledge gained from experience.

⁶⁹ One informant noted that there was virtually no succession planning for employees with HIV/AIDS due to

A mix of these approaches is likely to minimize costs and risk, and maximize effectiveness. Replacement strategies (ie increased training output; recruitment incentives) tend to be costly. In addition, some of the other strategies have more potential to actually enhance performance above existing levels, or to preserve institutional memory and “soft skills” which are difficult to teach in conventional training.

3.7.1 Educator provisioning

As illustrated above, the cumulative loss of educators to HIV/AIDS between 2002 and 2010 is likely to be substantial, at between 860 - 3 360 under the ARV and non-ARV scenarios respectively. This would be equivalent to between 5% or 19% of the current educator workforce.

The number of educators who will have to be trained, and whether training capacity will need to be increased above current levels, depends on several factors. These include not only on HIV/AIDS deaths and ill health retirements, other causes of attrition, the projected number of children of school-going age, target learner:educator ratios and access to ARV programmes. Importantly, assuming that numbers of educators required will fall due to lower growth in learner numbers is hazardous.

- Total learner numbers are still expected to increase for some time and there are uncertainties about key parameters like fertility rates.
- Class sizes might decline, rather than the number of classes and teachers required, due to practical difficulties of maintaining basic access in many communities.
- There will be possible shortages of teachers at different levels in the schooling system or in certain specialist fields.

The importance of refining estimates of training requirements, and strategies to address skills losses, is illustrated by several comparisons related to projected HIV/AIDS deaths among educators.

- *The potential costs of extra teacher training to replace staff who die of AIDS* would be around N\$ 135 million under an ARV scenario and N\$ 35 million with ARVs if training college output has to be increased by the full number of projected teacher AIDS deaths from 2002-2010.⁷⁰
- *The potential number of replacement teachers to be trained* would be equivalent to 14% to 55% of current training college output between 2002 and 2010, under the ARV and non-ARV scenarios respectively.⁷¹ Fairly small rates of attrition due to other causes of each year could potentially lead to insufficient training capacity in non-ARV scenarios.

Recommendations – skills losses and educator training capacity

Until the MBESC teacher provisioning model has been finalized, uncertainty about appropriate responses to attrition will remain. However skills shortages are already important and many of the challenges are clear.

The MBESC and MHETEC should develop a specific capacity development strategy for educators, management and other skilled staff in the sector that considers HIV/AIDS impacts. The strategy should consider the full range of replacement and other potential approaches to address skills losses. Priority should be given to the options that are most feasible and cost-effective options, that leave flexibility to respond to new trends, and that can actually enhance sectoral performance independent of their role in countering HIV/AIDS impacts. The following specific recommendations are made.

ongoing stigma and non-disclosure.

⁷⁰ Costs are in 2001 Namibian \$ based on unit cost estimates for teacher training colleges developed for the Presidential Commission, inflated by CPI to 2001 prices. Costs would be expected to be higher due to losses among UNAM-trained educators.

⁷¹ Based on numbers of third year students from the 2001 Summary Annual Census of Teacher Training Colleges, excluding UNAM.

a) Educator provisioning and training

- *Incorporate HIV/AIDS mortality assumptions into teacher provision modeling* as soon as the MBESC model has been refined.
- *Closely track attrition among trainees and graduates of colleges and UNAM* and any labour market influences.
- *Review the content, structure and duration of current pre- and in-service training.* A substantial amount of investment in teacher training will be lost due to HIV/AIDS and there may be need for rapid training of teachers. Course duration, structure and content may warrant modification to ensure that they are *cost-effective and flexible* to respond to these needs without compromising quality. Options may include more modular training and tiered qualification systems.
- *Pay particular attention to specialist or shortage skills areas, including management.*
- *Consider regular audits of skills requirements* to allow for more responsive and *targeted pre-and in-service training* focused on the skills that are most critical for success of the education system.⁷²
- *Consider contingency measures to deal as flexibly as possible with uncertainties about future attrition rates* and unexpected shortages. These may include strategies such as:
 - Incentives or systems to delay retirement of teachers with key skills or in underserved areas, or to bring teachers out of retirement.
 - Rapid, targeted training to upgrade teachers, relief teachers and community members who may have to take on new teaching roles when other staff are absent.
 - Efficient expatriate recruitment systems

b) Other strategies for skills development and sharing.

- *Enhance succession planning.* Also review issues such as possible implications for skills transfer and succession of measures such as scrapping deputy principal posts in smaller schools in new staffing norms.
- *Consider other systems that may enhance efficient use of available capacity and reinforce knowledge transfer.* This may include: improved communication systems to keep educators and managers informed and learning about other components of institution or system function; systems to reduce unnecessary bureaucratic procedures and routines to limit time demands on key staff; and clusters and mentoring systems such as study and professional development groups for educators and managers.

3.7.2 Content and focus of pre- and in-service training

Pre- and in-service training have a critical role in reinforcing prevention and managing impacts on learners, staff and system function. This role goes beyond simply ensuring output of adequate numbers of graduates, and related considerations of training capacity and efficient design of course structure and duration.

In-service training is likely to be increasingly important to supplement HIV/AIDS and general professional skills of new and existing educators. Since independence, in-service programmes have focused largely on qualifications upgrading. There are already indications that there is a need for more focus on specific skills areas that are likely to add most to professional development, quality of education and efficient system function.

⁷² The audit may be particularly useful in primary and combined schools where specific subject results are often not available to identify weaknesses. Some lessons may be obtained from the mathematics and science improvement programme that has focused on skills in these areas.

Recommendations – enhancing appropriateness of pre- and in-service training

- *Aggressively promote effective prevention programmes for trainees (see section 3.6.2 above).*
- *Target teacher trainers and college management to enhance their skills and confidence both to provide more effective training around HIV/AIDS issues and to protect themselves and manage impacts on training college staff and function.*
- *Review the content of training and curricula.*
 - *Strengthen current initiatives of relevance to HIV/AIDS responses, including learner centred and other innovative approaches to teaching.*
 - *Consider new competencies that may be required of educators. These may, for example include needs for enhanced skills in:*
 - *HIV prevention*
 - *Vulnerable children support including counselling, child legislation and support systems.*⁷³
 - *Professional and other ethical issues.*⁷⁴
 - *Maintaining quality of learning when colleagues are ill or absent.* These may include skills in teaching large-classes, use of distance learning materials and methods, use of teaching assistants and processes to ensure planned, efficient handovers when absences occur.
 - *Consider greater emphasis on management skills to equip more staff to take on management roles in view of attrition among current and future managers, and to deal with existing management skills deficits.*
 - *Increase focus on experiential rather than theoretical learning.* For example:
 - Consider use of trainees' assignments such as attachment to social workers or "Circles of Support" to build skills in OVC support, or to MFMC teams for prevention issues.
 - Consider management attachments and stronger mentorship programmes as part of in-service training to enhance management skills.⁷⁵
 - *Consider simplifying the overall school curriculum or other ways to reduce vulnerability to shortages of skills in certain curriculum areas.* Relative to the size of its education system, Namibia offers a very varied curriculum, with a large number of subjects. Requirements for large numbers of educators with specialised skills to offer the subjects in many locations (often as the only educator able to teach the subject in their school) increases vulnerability to absence or loss of educators. Simplifying the curriculum or developing ways to offer specialised subject in a reduced number of locations may decrease vulnerability and also reduce overall costs.
 - *Other issues for consideration include:*
 - Review of any tendencies to over-emphasise *specialised training*, in order to ensure that graduates have greater flexibility to cover for loss of specialist subject teachers. A greater degree of "multi-skilling" or re-skilling may be appropriate.
 - Training to address needs of out-of-school youth and adults who have had interrupted education.⁷⁶
- *Consider cost effective ways to build skills of relief teachers and other resources such as community members who are used to cover for absent staff.*

⁷³ Counselling, rights issues and legislation are include in curricula but students and other informants indicated that in many instances these issues were covered superficially and sometimes not at all, and did not provide the depth of skills required by educators.

⁷⁴ Coordination with professional unions in such initiatives is likely to strengthen them substantially.

⁷⁵ Current exposure in school-based studies components for teaching theory and practice are reported to often not function very efficiently.

⁷⁶ This may include building on NAMCOL techniques and experience.

In addition, colleges should develop systematic approaches to supporting infected and affected trainees to ensure that they can continue with training and access appropriate care and support, including ARV treatment if possible.

3.7.3 Other HR management issues

Performance appraisal and management

Performance assessment and management systems and tools can help to establish a more objective basis for decisions on when teachers and other staff are unable to continue working. However, conventional performance appraisal and management systems often have shortcomings in managing HIV/AIDS among employees. Systems tend to be focused on motivating employees rather than assisting employees and managers to deal with unavoidable declines or limits on performance. Systems also have to be able to assess and act on quite rapid declines in function, as well as potential for recovery from periods of illness.⁷⁷ In an education context, many tools of performance appraisal such as examination results are unlikely to pick up many important performance problems early enough to protect education quality.

Possibilities for use of performance management in dealing with HIV/AIDS related problems should be explored. However, they should consider the specific performance issues raised by HIV/AIDS, and learn from recent attempts by OPM and line Ministries to implement performance appraisal and management, which have encountered difficulties, although further system development is anticipated.

Discipline and grievance procedures

Efficient discipline and grievance procedures are important to ensure that infected employees can protect themselves from unfair discrimination by colleagues and managers. They can also be critical to discipline employees and managers who violate infected employees rights, to ensure that infected employees fulfill work and workplace- related obligations, and to combat sexual and other harassment of learners and staff. Under the Public Service Act, grievance and discipline procedures and rights are clearly set out. However, clearer guidelines to enhance efficiency of the system, as well as sensitivities in dealing with HIV/AIDS related issues (including confidentiality) are likely to be needed.

3.7.4 Cost implications - summary

Estimates of cost implications of HIV/AIDS among staff are summarized in Table 3.5 They suggest several important conclusions.⁷⁸

- *Pension fund costs* are reported by the GIPF to be unlikely increase substantially due to HIV/AIDS.
- *Medical aid costs* are likely to be the single largest HIV/AIDS related cost. Projections of ARV costs are subject to many assumptions but suggest that, ARVs are a potentially affordable strategy for the education system.
- *Costs of extra teacher training to replace staff who die of AIDS* need to be refined. However, the notional costs of replacing lost educators would be high. Notional costs in the absence of ARVs would be lower than ARV costs but of a similar overall magnitude and with other potential indirect benefits.

⁷⁷ HIV/AIDS can have a fluctuating, unpredictable course and severely ill people (eg with TB or who go onto ARV treatment) can stage remarkable recoveries after periods of profound incapacity.

⁷⁸ All costs are stated in constant 2001 prices.

- *Absenteeism costs* will often be hidden and manifest as declining quality of education. However, costs of well-managed *relief teacher systems* targeted at AIDS illness and schools in greatest need seem potentially affordable.
- *Other costs such as costs of transfers and delays in replacement of staff are likely to be lower than for illness related absenteeism.* However, with reported average delays of 3 months in appointment of replacement staff this could add a further 50% to estimates of costs of absenteeism due to illness.

Table 3.5: Summary of key cost implications of HIV/AIDS among employees

1. Pension fund	Neutral
2. Medical Aid - ARVs	N\$ 146m to 2010 2% of school costs by 2010
3. Extra teacher training	N\$ 35 m (ARV) N\$ 135m (no ARV) to 2010
4. Absenteeism/ relief teachers	< / = 1.7% of payroll

3.8 Conclusions and recommendations – impacts on delivery of education

Several important conclusions emerge from the experience in Namibia and other countries.

- *Effects of illness and death on staff impact substantially on many schools and classes.* The schools that tend to be most vulnerable tend to be those in traditionally disadvantaged situations. They include those that are small or remote, in poor communities, and which have multiple sick members or affected members of staff.
- *HIV/AIDS alone is not destabilizing the whole education delivery system thus far, and seems unlikely to have disastrous impacts on overall delivery in any given year.* HIV/AIDS tends to exacerbate pre-existing challenges to quality and access, but is not necessarily a dominant factor at system level. However, significant numbers of schools and classes may be much more severely affected.
- *Cumulative effects of unmanaged HIV/AIDS impacts on staff threaten to be a significant obstacle to system performance.* The epidemic will be a further drain on the skills base, institutional memory and morale.
- *Cost implications of HIV/AIDS among staff and important response strategies are significant but probably manageable.* Many important costs are more likely to manifest as a gradual decline in accessibility and quality of education if resources are not allocated to managing them.
- *Many significant impacts may be difficult to pick up timeously from macro-level and quantitative analyses and data.* This should not lead to complacency as it may hide subtle but important trends and severe impacts on education of significant numbers of learners.
- *As the nation's largest employer,* the sector also has a critical contribution to make to the national effort to address prevention and impacts management in the workplace.

Many impacts of HIV/AIDS on quality and accessibility of education delivery will occur gradually. Staff and planners may become used to lower standards or not recognise the impacts until they have become gross and more difficult to reverse.

The education sector's response to HIV/AIDS impacts on staff and education access and quality is not yet well developed. Recommendations to consider on key policy, planning and management issues include the following.

- 1) **Develop a clear workplace HIV/AIDS Policy and Programme.** This should provide a framework and key capacity to guide the many components required for an effective response. The policy and programme should have an integrated, holistic approach involving HIV/AIDS prevention, care and support, and managing impacts on education delivery.
 - *Promote voluntary counselling and testing* but try to do this in the context of being able to offer supportive responses to those who do test positive.
 - *Impact management should prioritise providing care and support to infected and affected staff*, both to respond to their needs as individuals, but also to create an environment that facilitates management of impacts on education delivery.
- 2) **Develop an effective HIV prevention and life skills programme for educators, trainees, and other staff.** This should aim to cover all education staff as soon as possible. Major spin-off benefits for learner prevention and support are likely.
 - *Programmes should be holistic and build on a clear understanding of critical success factors for workplace prevention programmes.*
 - *Structural risk factors related to employment and training environments should be addressed as far as possible.* These include quality of accommodation, financial positions of trainees and separation from regular partners.
- 3) **Establish a Wellness or Employee Assistance Programme (EAP)** to provide an integrated framework of support to assist infected and affected staff to deal with stresses created by HIV/AIDS. Coordinate with other Ministries, unions and private sector providers to ensure efficiency, accessibility and feasibility of support systems.
- 4) **Strengthen medical aid cover and access to ARVs.** The education sector should actively seek to influence reform of PSEMAS, to ensure efficiency and sustainability of care for HIV/AIDS and other health care. The Ministries should emphasise the importance of ARV treatment for educators as a key component of education sector strategy.
- 5) **Review pension benefits and administration.** HIV/AIDS fundamentally changes the profile of needs to be met by the GIPF. Benefit structures should be reviewed to ensure that they meet social, employee, financial sustainability and service delivery objectives adequately. A number of different benefit structures may be viable. Streamlining of the medical Boarding system, training of personnel officers and managers and information for members on benefits should be prioritised.
- 6) **Review pre- and in-service training.** These have a critical role in reinforcing prevention and impact management strategy. In-service training is likely to be increasingly important to supplement HIV/AIDS and general professional skills of new and existing educators.
 - *Aggressively promote more effective prevention programmes for trainees.* This is likely to be one of the most cost-effective approaches to HIV/AIDS over the longer term. Programmes should also provide skills related to management of HIV/AIDS impacts on staff and learners.
 - *Review the number of teachers to be trained.* Develop strategy on teacher training output in conjunction with other approaches to addressing skills deficits and reducing loss of educators.
 - *Review the structure, duration and content of training* to limit lost investment in trainees and increase potential for rapid training of teachers.
 - Curricula should consider *new competencies* that may be required of educators, for example HIV prevention, vulnerable children support, and to maintain effective education when other teachers are absent.
 - Greater emphasis on *management skills* may be required.
 - *Other issues* for consideration include review of approaches to specialised training.
 - *Consider cost effective ways to build skills* of relief teachers and other resources such as community members who are used to cover for absent staff.

- *Consider review and simplification of the overall school curriculum or other delivery strategies*, to reduce vulnerabilities of needs for large numbers of specialised educators.
- 7) ***Strengthen management of absenteeism and ill health.*** Absenteeism is a major problem independent of HIV/AIDS. In many instances, absenteeism and ill health are simply not managed, with negative implications for infected staff, education delivery and colleagues. Several components of a coordinated approach require consideration.
- *Review sick leave entitlements* to ensure that an employee's health status is confronted and active management of ill health absenteeism begins before negative impacts on learning and affected individuals.
 - *Streamline medical boarding and disability management processes* to ensure fair, timeous assessment and review.
 - *Ensure that pension entitlements do not create incentives to delay timely application for ill-health retirement.*
 - *Review and monitor compassionate leave and funeral attendance entitlements* and systems.
- 8) ***Create effective relief teacher and other systems to cover for absent staff.*** Efficiently managed relief teacher systems seem potentially affordable and respond to a major problem in education.
- 9) ***Strengthen HR and other management systems and capacity.*** Training to build confidence and competence of line and HR managers in basic human resource management and development will also improve general system performance. Specific systems that need to be strengthened include the following:
- *The Cluster system* to share and building capacity and expertise.
 - *Succession planning.*
 - *Efficient recruitment, appointment, redeployment and transfer systems and practice.*
 - *Other innovative means of skills sharing and transfer*, including teamwork and improving routine and other communication.
 - *Performance appraisal systems* to ensure fair assessment and management of incapacity among infected staff.
- 10) ***Identify vulnerable workplaces and work processes for targeted interventions.*** All levels of the education sector should undertake a systematic review to identify workplaces and processes that are most vulnerable to absence or loss of staff, and develop specific strategies to address them.
- 11) ***Improve information.*** Many aspects of HIV/AIDS impacts on the education system capacity remain unclear and better information is required. This should include:
- *Active tracking of illness, death, absenteeism, medical aid/ARV use and staff distribution allocations.*⁷⁹ Consideration should be given to the role of *Personnel Administration* and revival of plans to computerise HR administration.
 - *Decentralised systems of HR data tracking and use, probably at cluster, circuit and region levels.*
 - *Consider an anonymous, unlinked HIV prevalence survey* among teachers and trainees to clarify levels of infection and help to mobilise positive responses.
 - *Regional, circuit and institutional level monitoring and analyses* will be important to ensure quality data and identify impacts that may not be apparent from aggregated data.
- 12) ***Capacity and coordination of employee impact management.***
- *Personnel Administration are a critical link in developing the HIV/AIDS policy, programme and review of conditions of service and general HR management systems.* The process will

⁷⁹ Tracking of absenteeism and attrition is already an objective in the strategic plan.

require dedicated capacity as well as involvement of stakeholders such as Staff Advisory Committees.

- *Coordinate with other stakeholders* such as the PSC, OPM, Health, Finance, other departments, unions and the pension and medical aid schemes to define overall strategy and implement specific components of the response.

4. HIV/AIDS effects on the role of other specific education components

4.1 Special Education

Special education has key expertise in programme planning and responding to the special needs of learners including providing guidance and counselling services, networking with other sectors and HIV/AIDS education. The MBESC should consider ways to strengthen, utilise and possibly integrate special education and DATS resources more effectively in HIV/AIDS initiatives and structures at all levels. Several issues warrant particular attention.

- *Reviewing and reprioritizing roles of SEU capacity in the regions.* At present regional counselors are seen as highly inaccessible by many schools and teachers. It seems critical that their skills are leveraged more effectively into schools through system development, and teacher training and support for early recognition and management of vulnerable children. There seems to be considerable scope for counselors to focus more systematically on prevention and early intervention rather than on learners referred at stages when they have become severely stressed and manifest “discipline and behaviour problems”. There also seems to be room for some shift of emphasis from psychological counselling towards interventions to deal proactively with basic social, economic and family issues that predispose to psychosocial problems.
- *Counselling and support groups* in schools should be evaluated and used to develop a more effective platform for response to orphans and vulnerable children, as well as life skills education.
- *Proposals for full time guidance and counselling / life skills posts* in schools made by the Presidential Commission should be resuscitated and refined in line with new strategy to meet the substantial needs of orphans and other vulnerable children, as well as HIV prevention.
- *Particular vulnerability of children with disabilities to HIV infection, as well as neglect when orphaned* should be considered in planning and service development.

4.2 Adult Basic Education and NAMCOL

The Directorate of Adult Basic Education (DABE) covers the National Literacy Programme (NLPN), the Adult Upper Primary Education programme (AUPE), Community Learning and Development Centres (CLDCs) and Adult Skills Development for Self-Employment (ASDSE). A further, but independent programme is NAMCOL which provides secondary level education to out of school youth and adults. Issues raised by HIV/AIDS for adult basic education include the following:

- *The HIV risk of target clients is likely to be particularly high*, as is their vulnerability to impacts of HIV/AIDS. This is due to social circumstances of out of school youth and less educated adults, and because women have traditionally made up the bulk of candidates and have generally been found to be at higher risk than men.
- *HIV/AIDS is likely to increase demand for AUPE and NLPN* above levels that would otherwise have been expected if it results in lower enrollment and completion among orphans.
- *The tradition of voluntarism and participatory community linkages* in DABE programmes are a potentially powerful resource in HIV/AIDS prevention and mitigation. Examples of literacy groups that had developed HIV/AIDS prevention activities were noted.
- *Income generating activities are a key intervention to support HIV/AIDS affected individuals and households.*

DABE programmes and NAMCOL are important resources in HIV/AIDS prevention and mitigation. They have unique linkages into disadvantaged and vulnerable communities and client groups, as well as strong traditions of outreach, and approaches that are learner centred, process oriented and community development related. Key recommendations for consideration by DABE include:

- *Increasing emphasis on effective HIV prevention programmes for learners.*⁸⁰ Important limitations that were noted were that non-formal programmes tended to have no Life-Skills component and that interaction with programmes such as My Future My Choice tended to be ad hoc. Efforts were seldom sustained. One non-formal programme manager commented: “If you do not follow-up on HIV/AIDS sessions, people just ignore them and throw away the pamphlets”. In literacy programmes, HIV/AIDS had been infused into other subjects (eg Population Education and gender) but there were no HIV/AIDS specific programmes.
- *Ensure strong integration of NAMCOL and DABE into general education sector and inter-sectoral HIV/AIDS programme activities at regional and District levels to maximize benefits available resources and activities.* Their officials were often noted to have little or no direct involvement with RACE and RACOCs, and to have little knowledge of NGO and community activities related to HIV/AIDS.
- *Develop a comprehensive strategy to integrate HIV/AIDS into all programmes activities* to benefit clients directly and to enhance prevention and mitigation in broader communities. Consider linkages with, for example, home based care and voluntary counselling and testing initiatives.
- *Explore ways to expand the ASDSE programme* to contribute to support for people infected and affected by HIV/AIDS.
- *Consider possible changes in the age profile and educational needs of the DABE and NAMCOL client base.* More candidates may be younger and in need of support for education in higher grades.⁸¹
- *CLDCs can play important roles as hubs for community activities, and ways to enhance their role in HIV/AIDS prevention and care among their clients and communities should be explored further.*
- *Monitor possible over-extension of school staff who also work as NAMCOL tutors* more closely in view the potential for HIV/AIDS to deplete school staff compliments, at least temporarily.
- *Review reasons for drop-out from NAMCOL and non-formal education programmes.* In the case of NAMCOL, it may be appropriate to review *fee systems* to ensure that these do not create unnecessary barriers to access by vulnerable learners. For example, examination and NAMCOL fees could perhaps be refunded if a client passes the subject for which they have paid fees.

Consideration should also be given to strengthening distance learning materials and techniques both for adult basic education programmes and to support learning in schools and classes where teachers are absent. NAMCOL distance learning materials were noted to be widely used by school learners.

4.3 Hostel management

Hostels are an important means of ensuring access to education and are a high cost component of the education system. The hostel system already confronts significant challenges including limited capacity, skills and enthusiasm of staff, infrastructure deficiencies and limited administrative controls. HIV/AIDS raises several challenges for the hostel system.

⁸⁰ In some regions, it appeared that NAMCOL had been more proactive than formal education in introducing HIV/AIDS activities though NAMCOL officials felt that their efforts had still been inadequate.

⁸¹ DABE has been increasing its programmatic focus on higher primary grades but its materials and approach are noted to often not be very suitable for younger learners.

- Many hostels are clearly environments that put learners at high risk of HIV infection due to poor infrastructure and security, limited control and supervision, abuse of learners by staff, and limited access to condoms.
- Children boarding out in communities around schools are subject to poor adult supervision, high risk of abuse and HIV infection, and generally poor living conditions.
- HIV/AIDS orphans will increase the need for hostel accommodation for vulnerable children.

The Directorate should consider the following recommendations:

- Develop a *policy on HIV/AIDS that clearly identifies roles and responsibilities* of schools and hostel staff at all levels in regards to prevention, mitigation, and care and support.
 - Include clear *policy on condoms and condom distribution* in hostels.
- Consider extending the *Health Promoting Schools programme* to hostels, with thorough integration of HIV/AIDS issues.
- *Urgently improve infrastructure and other aspects of hostel safety and security*, including inspection systems and other mechanisms and networks to report and act on problems.
- *Reinforce accountability and skills of hostel managers, inspectors and school heads* to ensure safety.
- Develop mechanisms to reinforce the *safety and accessibility of community boarding* where expanding hostel accommodation is not viable. This may include accreditation systems.
- *Review hostel staffing and management*. Supervision should be available at all times after school hours. Strongly consider full time hostel management posts for non-teachers and involvement of responsible community members or groups to enhance supervision, quality and safety.

4.4 NIED

NIED has already developed several initiatives to integrate HIV/AIDS more effectively into curriculum and syllabus development for teacher training and schools. HIV/AIDS issues are seen as a major consideration in the Curriculum Review. Full evaluation of HIV/AIDS curricula and syllabi was beyond the scope of this project. However, several important considerations for NIED have emerged. These include:

- *Incorporating a broader range of HIV/AIDS issues in curricula*. These include greater emphasis on positive HIV/AIDS messages, care and support, positive living, counselling and other support of vulnerable children, and ethical and legal issues around teaching and children.
- *Working with National Examinations and Assessment, as well as partners such as the schools Inspectorate and Training Colleges to improve ability to examine or otherwise assess performance in HIV/AIDS education*. This is critical to reinforce prioritisation of HIV/AIDS at all levels in the education system.
- *Developing guidelines on processes that facilitate more effective introduction of new curricula and HIV/AIDS related interventions* into schools and overcoming resistance particularly around sexuality education.
- *Working with teacher training partners to:*
 - Evaluate implementation and effectiveness of HIV/AIDS curricula for teacher trainees.
 - Introducing effective life skills programmes for trainees.
 - Increase practical rather than theoretical training in areas such as counselling, support of vulnerable children including inter-sectoral collaboration, and management skills.
 - Re-orientate in-service training from upgrading of qualifications to practical professional skills development to strengthen basic education delivery and HIV/AIDS related skills. In service training is likely to be a particularly critical component of developing teacher capacity to deal with HIV/AIDS issues.
 - Consider restructuring curricula and qualification frameworks which can increase flexibility to respond to urgent skills needs and enhance cost effectiveness of training overall. This may include more modular structures that can provide core generic skills

- more rapidly, followed by more specialised modules that respond to key skills needs and lead to full qualification.
 - Consider short course curricula to upgrade teaching skills of relief teachers and volunteers with limited or no formal training.
 - Strengthen current initiatives of relevance to HIV/AIDS responses, including learner centred, innovative and flexible approaches to teaching.
 - Developing skills in areas that might otherwise be assumed to be of declining importance eg large-class teaching skills, use of distance learning or non-formal materials and methods
- *Consider ways to limit reliance on availability of large numbers of educators with specialised skills.* This may include simplifying the overall school curriculum to reduce the large number of subjects or offer them in fewer locations.

4.5 Planning and development

Planning and Development is responsible for overall planning in MBESC, the Ministry's development budget, collection and analysis of EMIS and other data for planning and monitoring purposes, as well as donor coordination.

The Directorate has a key leadership role in coordinating the plans of the many other directorates and units which will need to respond to HIV/AIDS issues identified in this report and integrating them into overall Ministry and sector strategy. Several specific challenges to the directorate due to HIV/AIDS are raised in this assessment.

- *Infrastructure planning* needs to consider projected HIV/AIDS impacts on learner numbers in different age groups, and has to factor in uncertainties around levels of impacts at more local levels. Plans also need to consider new or more urgent needs of learners such as counselling rooms and greater need for secure hostel or alternative accommodation. HIV/AIDS may influence the desired size and shape of classrooms and schools to reduce vulnerability to staff absenteeism and loss.
- *Human resource planning* needs to factor in HIV/AIDS impacts on staff and learner numbers. Staffing norms warrant review to incorporate strategy on issues such as: need to increase dedicated capacity at cluster and school level over time to address HIV/AIDS and guidance and counselling issues; possible complications if certain schools or workplaces have disproportionately large numbers of ill staff; relief teacher financing and resource allocation mechanisms.
- *EMIS* needs to track HIV/AIDS related impacts on learners and staff. It should also consider building in elements of tracking of key HIV/AIDS programme resources and implementation as part of routine management information. Strategy needs to consider more decentralised, disaggregated analyses and use of information to identify trends and problems that may not be apparent at aggregated level (see also Annex E and Annex G).
- *Research.* Routine EMIS data and analyses will often not provide adequate information to guide planning and allow interpretation of trends in a period of growing changes and uncertainties due to HIV/AIDS. More non-routine and qualitative information will be required to inform planning and monitoring on HIV/AIDS issues that are not amenable to quantitative analysis alone. Opportunities to use projects such as SACMEQ to improve understanding of key determinants and trends of quality in schooling should be explored.
- *Donor coordination.* The Directorate will have a key role in ensuring that appropriate HIV/AIDS dimensions are built into support programmes, including raising sufficient funding and technical support, where necessary, to ensure that key aspects of the sector's response are initiated and supported.

4.6 Sports and Culture

Sport and culture can play several important roles in the HIV/AIDS response. These include promoting prevention by providing alternative entertainment to reduce HIV risk, active promotion of

HIV/AIDS prevention and impact mitigation messages through sports events and role models. Sport and cultural activities can also facilitate stress management, socialisation, and positive peer interaction for orphans and vulnerable children. Heritage and culture programmes can also play a key role in mobilizing communities around HIV/AIDS issues, reinforcing cultural and other norms that enhance prevention and support, and engaging with those norms that may increase HIV/AIDS risk and vulnerability of women and orphans. Within schools sports and culture can play key roles in creating nurturing environments for children who are at risk of HIV or made vulnerable through HIV/AIDS impacts.

4.7 Early Childhood Development

MBESC has responsibility for training and curriculum development for Early Childhood Development (ECD) with other aspects falling under other Ministries. ECD has relatively low coverage in Namibia for cost reasons. Training and curriculum development, and discussion with implementing partners, should consider that ECD has important roles in: laying foundations of HIV prevention from early ages in its curriculum; nurturing, caring and socialising young orphans with limited parenting at home due to HIV/AIDS impacts; and relieving older children of sibling support roles so that they can attend school. ECD should also be aware that a significant proportion of their target age group will be HIV-infected and make appropriate responses in terms of support and precautions. Reliance on community funding for aspects of ECD may become more difficult due to economic impacts of HIV on households.

4.8 Higher education

Higher Education represents a major investment by Namibia. This sector is the Government's leading agency for human capital development, national technical capacity building and knowledge creation. The major components of the sector include University of Namibia (UNAM), the Polytechnic of Namibia, Youth Development and Employment Creation, Vocational Education and Training, and the four Colleges of Education. Specific issues related to the latter two components are discussed in other parts of the report. Most of the institutions are relatively young and face challenges of rapid expansion and ensuring quality preparation of students for work in the Namibian economy.

Many challenges of HIV/AIDS in higher education are similar to those discussed in relation to impacts on needs and capacity to deliver for the schooling system. Recent reports of impacts at UNAM and other institutions suggest relatively low rates of deaths among students and staff. Some deaths of skilled staff had been disruptive. However, projections and experience of tertiary institutions in other countries with advanced epidemics suggest that illness and death rates from HIV/AIDS among students and staff are unlikely to be debilitating to the institutions in any one year. There are several distinguishing features of the challenge of HIV/AIDS to these institutions.

- *Levels of HIV infection among students have to be assumed to be in around 20-25% based on national prevalence rates.* The main impacts of HIV/AIDS on the effectiveness of the institutions is hidden as most student deaths and illness will occur after graduation. Reports suggest that the environment in many higher education institutions, particularly in relation to hostels, residences and alcohol, puts students at high risk of HIV infection.
- *Lost investment in students will be substantial* due to high unit costs of education in these institutions and the opportunity cost to Namibia of losing individuals from small pools of highly skilled people.
- *Needs for support of students who are infected and affected can be significant.* Although the number of students who actually have AIDS will be relatively small, the demands and stress on the institutions for care of even individual students with AIDS, can be considerable.

- *Cumulative impacts of death and illness on academic skills and knowledge creation*, due to loss of specialist staff (and promising students), may have significant implications for education quality and attempts to reduce reliance on external staff.
- Particular financial issues may arise in relation to *loans and financial aid* for students.
- *Higher education students and staff are a key resource to the nation in terms of skills to support national and community initiatives* around HIV/AIDS as well as research. Graduates also will need to provide leadership in a society and workplaces that are profoundly affected by HIV/AIDS.

At current infection rates it has to be assumed that roughly one quarter of investment in higher education could be lost to HIV/AIDS deaths, or massive unnecessary human and ARV treatment costs will be incurred. Other impacts on higher education staff and students will be substantial over time. Thus, despite its relatively low impact so far, HIV/AIDS needs to be embraced as “core business” for all institutions.

Despite studies and attempts by higher education institutions to organize responses to HIV/AIDS, progress has been slow and its effectiveness uncertain. Institutions have generally not had holistic, coordinated or sustained strategies to deal with the range of HIV/AIDS issues. HIV/AIDS programmes for staff have been a notable gap. The main limitations on action seem to be difficulties mobilizing academic staff in particular, combined with limited capacity and capabilities, and substantial stigma and denial. The current Education HIV/AIDS Strategy covers development of an HIV/AIDS course for all students in higher education; an inter-institutional structure to coordinate efforts; research on HIV/AIDS; and primary health care and social welfare services to staff and students.

Successful responses are likely to require further refinement of Higher Education components of the HIV/AIDS strategic plan, to cover emerging priorities and give more detailed guidance on what is expected of each institution. Particular recommendations for consideration include the following.

- *MHETEC should provide decisive ongoing support and inducements* to assist institutional leadership to drive an effective HIV/AIDS programme and overcome inertia of staff and students. Coordination with MBESC programmes particularly at regional level should be explored to maximize synergy and efficient use of resources.
- *Ensure that the new HIV/AIDS curriculum is “world class” and is implemented effectively.* Complementary prevention activities and messages to reinforce the programme should not be neglected. These may include issues such as campus safety and harassment, alcohol control, condom access, peer driven programmes and infusion of HIV/AIDS into other courses.
- *Strongly consider institutionalising involvement of all students in outreach prevention and support programmes.* Active involvement and training is likely to strongly reinforce prevention and other skills. Targeting *feeder schools* could have major benefits for the institutions.
- *Consider options such as challenge funds* for students and staff to develop innovative interventions and research.
- *Review planning of student output and curricula.* Pay particular attention to scarce skills areas, teacher training, and courses that face increasing demands due to HIV/AIDS eg. health sciences and social work. Also review financial incentives to do courses such as social work. Strategy should consider options for altering course structure, duration and content to meet any increased needs for outputs rapidly and cost effectively.
- *Reinforce development of a comprehensive workplace strategy and programme* covering all relevant aspects of prevention, care and support and impacts on institutional function.
 - *Initiate a formal life skills/ prevention programme* for staff at all levels and consider *targeted HIV/AIDS training for all academic and management staff.*
- *Develop capacity for support of infected and affected students.*

- *Explore strategy to ensure antiretroviral drug provision to staff and students.* This needs to consider issues such as delivery systems, costs and sustainability particularly after students graduate.⁸²
 - *Consider other components of support such as counselling and financial support.*
- *Review the student loan and international bursary systems to ensure that they support students adequately and the sustainability is not threatened by HIV/AIDS impacts on students.* Financial support may be important for increasing numbers of students affected by HIV/AIDS impacts on their families, and to reduce pressures on students to have high risk sexual relations for financial reasons. However, sustainability of repayment mechanisms may be threatened if infected or affected students are unable to repay loans. The relative importance of this in determining scheme sustainability is not certain and would require further investigation. Particularly given the potential availability of ARVs to many students after graduation, exclusion of students from funding on the basis of HIV status is likely to be an unacceptable violation of their rights. The most important immediate strategy is likely to be targeted prevention programmes and effective induction training of beneficiaries. Programmes should include promotion of voluntary counselling and testing, positive living and planning to ensure effective support and treatment, to make sure that infected students can access support effectively to preserve their well-being and the investment in their training.
- *Consolidate a framework for routine monitoring of HIV/AIDS impacts and responses* including a representative *anonymous HIV prevalence survey* of students and staff.
- *Systematically promote practical HIV/AIDS related research* by higher education institutions, including UNAM, to harness their unique ability to improve knowledge about the effects of HIV/AIDS and effective responses.
- *Ensure ongoing networking with other SADC higher education institutions to share learning.*

4.9 Vocational Education and Training

Vocational Education and Training falls mainly under MHETC. However, pre-vocational skills are also taught at primary, junior secondary and senior secondary schools, with agriculture being the most prominent component of vocational studies in schools. In addition to training in Vocational Training Centres which target school leavers, Community Skills Development Centres target unskilled youth with competency-based short course training. Demands for VET have been rising, and particular demands by Grade 10 leavers and other out-of-school youth have been noted. Thus far, prevention programmes in the VTC sector are reported to have been limited and attention has mainly focused on care and support of sick staff.

VET has been suggested as an important part of responses to orphans and vulnerable children in that it may provide an accessible way to provide them with various economic skills when varying pressures make it impossible for them to complete formal schooling. However, must also be noted that vocational subjects in schools are not popular with schools or learners, and that all levels of vocational training tend to be subject to relatively high costs and shortages of equipment and skilled staff. Particular issues for consideration in relation to VET include the following:

- *Needs for vocational skills in the economy are likely to be increased by HIV/AIDS* attrition, and adequate output of VET should be assured. Private sector training output should also receive attention as there are anecdotal reports from SADC countries that some private employers may be reluctant to invest in training through concerns about loss of investment due to AIDS deaths among trainees.

⁸² ARV provision for staff is likely to be best handled through medical aid mechanisms, possibly with government cooperation in sourcing cheaper drugs. Certain South African universities are beginning to explore options for ARV treatments for students and may provide some insights into how to implement programmes.

- *Increasing access to short competency-based courses and vocational courses in formal schools* that are more popular and feasible should be considered as a potential strategy to equip vulnerable children for the world of work.
- *Particular attention should be given to prevention programmes* for COSDEC and other students who may not have been reached by school based programmes and may be at high risk of HIV infection.
- *Scarcity of vocational teaching staff* requires that particular attention is paid to prevention and treatment initiatives for staff, as well as training and incentives to teach if labour market demands become more acute due to AIDS attrition.

4.10 Youth Development and Employment Creation

Youth Development and Employment Creation under MHETEC includes programmes such as youth Skills Training Centres and National Youth Service. It has also been involved in activities to address issues such as HIV/AIDS education and clubs, youth friendly reproductive health services and substance abuse programmes targeted particularly at out-of-school youth. Youth centres are located in several of the major centres, with plans to extend the programme to others as funding support becomes available.

The activities of the Directorate have wide relevance to combating effects of HIV/AIDS. The programmes include unique mechanisms to reach out-of school youth and the broader community with prevention messages, as well as economic and social survival skills training for youth whose formal schooling may have been interrupted.

Key challenges include:

- Enhancing the Directorate's capacity and funding base to expand programmes to meet HIV/AIDS and other needs of youth
- Reviewing models to allow implementation of key programmes without reliance on custom-built youth centers which may be impractical and expensive to implement in sufficient smaller centres and communities.

5. Driving the HIV/AIDS response

Strengthening Education Ministry HIV/AIDS programme capacity and structures at all levels is a priority to ensure an effective response to the epidemic. In the longer term many HIV/AIDS related functions should be integrated into core functions of various directorates and programmes. However, initial investment to ensure coherence and coordination of the response is critical to create a stable foundation for success. The range of HIV/AIDS impacts and responses that are required, demands dedicated, strong capacity as well as active participation by other education sector components. Several of the challenges to be confronted are illustrated in by the following comments.

“HIV/AIDs is becoming a serious problems in education. If it is to be addressed, this has to be done by people who do not have other jobs to distract them” (Senior MBESC official)

“We need a full time person to provide advice, support and monitoring within the RACE. At the moment, there are a whole lot of things just hanging in mid-air. (RACE member)

“We have not succeeded in addressing HIV/AIDS issues so far because we have not worked on the issues at a deep enough level in ourselves and in responses” (Senior MBESC Manager)

“Strategic Plans that have been submitted to RACOC in several educational regions only identify ways in which education offices want the MOHSS to assist them; many indicate that most educators and planners perceive the problems of HIV/AIDS to be a health problem” (RACOC Secretary)

5.1 Programme structure, capacity and function

In view of resource constraints, a basic programme structure is proposed for consideration (Figure 5.1). Several issues should be considered in assessing the proposed structure:

- *Care must be taken in selection of staff* for HIV/AIDS programme structures and activities. No structure is likely to function effectively unless its staff are appropriately skilled and motivated. At present there is a tendency at all levels to allocate HIV/AIDS responsibility to educators or managers who are “left over” when other functions have been allocated.⁸³ The need for strong technical leadership was illustrated by a Ministry official’s comment: *“the big problem is know-how. Programme members do not know what they should do and how to do it. Ministry leadership often does not make important decisions as they are also not confident about what to do”*.
- *Clear definitions of roles, responsibilities and mandates of various programme-related posts is required, and needs reinforcement by senior Ministry management.* HIV/AIDS programme senior staff often tend to get bogged down in operational and implementation issues when their key roles, from national down to cluster and school level should be to coordinate, facilitate and provide strategic direction. In addition, other officers or educators role players often “pass the buck” to designated HIV/AIDS programme staff at any level when the active involvement of those role players is critical to solving problems and ensure action on many key issues.

⁸³ Informants noted that the success of RACOCs has tended to be highly dependent on the skills and motivation of Regional AIDS coordinators.

- *Programme staff must have sufficient authority.* They need to be able to influence other role players to ensure action. Direct reporting of the programme director to the Permanent Secretary and participation in senior management meetings can be important to ensure that they have sufficient influence and that HIV/AIDS issues do not fall off agendas.
- *The structure is expected to interface with a series of committees and focal persons* at all levels. These include national ministry HIV/AIDS Committees, teams such as the Task Force on Educationally Marginalised Children, RACEs, cluster committees, and Counselling Support Groups. This is critical to ensure that the programme obtains adequate support from other units, managers and staff, and for effective monitoring of performance.
 - *Consider formal integration of key existing capacity and expertise with the structures.* Important examples are SEU capacity and the task force on Marginalised Children.
 - *School Boards and parents* are key resources whose involvement should be cultivated.
- *Inter-sectoral coordination will be a critical success factor at all levels to access appropriate expertise and allow for coordination of capacity.* key partners will include NGOs and CBOs, in addition to other government sectors,. However, for more successful interaction with other sectors, MBESC must ensure that it has allocated sufficient resources, and has strengthened its HIV/AIDS mandate and management systems so that it can be supported more effectively by those sectors
 - *Sufficiently senior officials (wherever possible the Regional Director) should be required to attend RACOC sessions* so that they can enforce decisions and report effectively to the PS on progress or setbacks of AIDS related initiatives in their regions. Lack of continuity of representation on RACOCs was also noted to reduce effectiveness.
 - *RACOC support and coordination will function better if RACE Committees are better prepared prior to RACOC meetings* by identifying problems and solutions with input and buy-in from the Regional Director, Circuit Inspector, Regional Educational Officers and school heads.

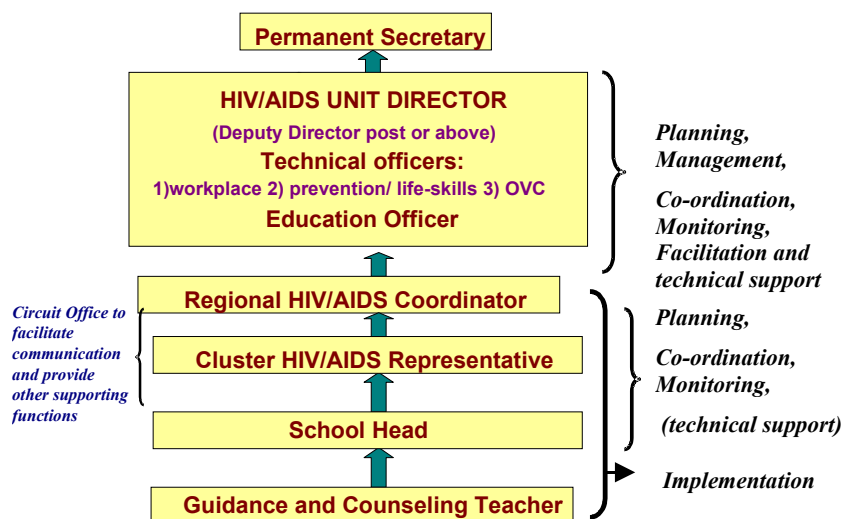
The Ministries' *HIV/AIDS Information Sharing Forum* is a potentially powerful mechanism to coordinate role players across sector and allow sharing of ideas and best practice. However, going forward it may be important to consider the following issues:

- *Coordination with other Ministries* to ensure that the forum does not duplicate or conflict with similar fora and initiatives in eg Health and Social Services. Education may well be the most logical sector in which to situate lead fora, particularly in relation to OVC.
- *Consider developing similar fora at region and cluster/circuit level* to complement RACOC inter-sectoral networking activities.⁸⁴

A key aspect of the proposed structure is that it should not become a rigid, centralised hierarchy, and should focus on *empowering decentralised initiative* and action.

⁸⁴ RACOCs currently meet quarterly. MBESC priorities and depth of liaison may not be adequately served in RACOC fora alone.

Figure 5.1. Provisional HIV/AIDS programme structure and functions at each level



Initially, at the *Cluster level*, a full time skilled Guidance/HIV/AIDS Coordinator should be appointed to provide technical support coordination and direct services to schools until they have adequate in school-capacity. At that stage the coordinator may be allocated to a specific school, with cluster coordination provided by them or by another school representative.

At *school level*, the Head should specifically be held accountable for implementation of HIV/AIDS responses by the school, its staff and any available local partners. As soon as possible, dedicated posts should be created for a Guidance and Counseling/ Life skills Co-coordinator, responsible co-ordination, referral activities and aspects of service delivery and technical support within the school. The Head should have discretion in the allocation of HIV/AIDS responsibilities (eg to a CSG or several teachers rather than an individual) provided that outcomes are achieved. They should ensure that all functions are not left to the Guidance teacher. In smaller schools, or to relieve resource constraints, consideration should be given to part time posts and sharing of guidance and counseling post between schools in a cluster.

Regional Offices require a full time HIV/AIDS Coordinator responsible for inter- and intra-agency coordination of activities, as well as to facilitate and provide technical support when necessary. *Circuit offices and inspectors* should facilitate communication between the Regional Office and Clusters, and monitor progress, but with no extra capacity.

At *national level*, the HIV/AIDS Unit Director should report directly to the Permanent Secretary and be a member of the senior management team to enable communication, authority and input into policy and strategy formulation. At a minimum, full time positions should be created for three Technical Programme Leaders responsible for each of the workplace, prevention and life skills, and vulnerable children programmes, plus an education officer and secretary to support the Director and the technical programme leaders.

Cost implications

Costs of the proposed structure should be considered in the light of it being a key investment to lay foundations of an efficient national response to a major, enduring problem. Also, programme capacity

should reflect the scale and complexity of its task - comparison of the size of the proposed structure with other programmes with similar or lesser mandates may be useful.

Nevertheless, costs of such a structure are considerable. Preliminary estimates of the costs of the full proposed structure are around an extra 4.8% on total MBESC payroll. The costs of a structure that includes full time staff only down to cluster level are estimated at an extra 1.1% of payroll.⁸⁵

Thus, in the short term, although dedicated guidance and counselling/ life skills capacity at school level are in line with Presidential Commission proposals, it seems appropriate to aim for dedicated capacity at cluster level as the appropriate goal. In addition, it may be appropriate in the initial phase to motivate for donor funding or volunteer support to reinforce and build capacity at central and regional levels.

5.1.1 Development of practical guidelines and tools

Development of practical guidelines is an urgent priority to guide decentralized action as soon as policy and strategy are confirmed in various areas. Despite efforts to interact with regions around the HIV/AIDS strategy and other initiatives, reports of lack of clarity on what was expected of key players and how to approach tasks were widespread. Use of conventional memoranda and circulars was noted to have important limitations in ensuring effective action. Guidelines and tools can be expected to lead to action in many cases, but will often need reinforcement through follow-up training and monitoring.

Key issues to consider in guideline and tool development or refinement are likely to include the following. Some may appropriately be integrated together.⁸⁶

General

- RACE function and responsibilities, and education leadership roles in relation to RACOCs;
- Development and refinement of school, cluster and region HIV/AIDS plans and programmes;
- Interaction with communities and School Boards to enhance cooperation on prevention and impact management issues;
- Integration of HIV/AIDS issues into performance appraisal for various staff and managers.

OVC issues

- Clearer guidelines for function of Counselling and Support Groups;
- Responsibilities and mandates of schools, educators and regional School Counsellors in relation to vulnerable children.
- A school “census” and register of vulnerable children, along with tools for identification of vulnerable children, needs assessments and prioritization, and appropriate responses.
- Streamlining fee and levy exemption systems for OVC;
- Development of Circles of Support and referral systems;
- Legal and other rights of vulnerable children;
- A Code of Conduct on dealing with issues confided by infected or affected children;
- Practical guidelines on counselling approaches and referrals;
- Responses to cases of abuse, including rights, procedures and systems for response;

⁸⁵ The calculations assume that the national structure involves a Deputy Director, 3 SEOs and one EO, and one EO in each region, and an average of six schools per cluster. Due to lack of data on staff packages, estimates should be considered to be a rough estimate only.

⁸⁶ A number of these issues are being considered in the Draft Education Sector HIV/AIDS Policy. Either the policy itself, or annexures and more specific guidelines must ensure that specific practical guidance on the relevant issues is available to educators at all levels.

- Referral of affected children who move to new schools so receiving schools are aware of vulnerabilities and can ensure welfare and other support;
- Access of vulnerable children to hostel or alternative safe accommodation;
- Rights and obligations of infected and sick learners and appropriate support responses;

HIV Prevention

- Accidental exposure to HIV and opportunistic infections in schools and precautions. This should include information to dispel unnecessary anxiety about accidental exposure.
- School and hostel safety.
- Condom distribution in schools and hostels.

Staff impacts

- Rights and obligations of infected, sick or affected staff, and their managers
- Positive living and specific resources and systems available to assist infected and affected staff.
- Guidelines explaining pension and medical aid benefits and how to access them efficiently.

Monitoring and evaluation

Improved monitoring and evaluation at all levels is likely to be critical to enhance programme effectiveness.⁸⁷ Requirements for effective monitoring and evaluation are likely to include:

- Guidelines and support on programme monitoring and evaluation for various levels of programmes. Specific guidelines to *inspectors and other senior managers* on monitoring prevention and impact mitigation issues will be centrally important to more effective mainstreaming of HIV/AIDS.
- Particular emphasis on participatory and qualitative approaches to enhance buy in and reliability of information.

Gender

This impact assessment could not define clear evidence of gender differentials in the severity of HIV/AIDS impacts on learners and staff. However, it is clear that girls and boys, and women and men have gender related differences in terms of susceptibility to infection and vulnerability to impacts (see Annex G).

- *A more thorough understanding gender issues related to HIV/AIDS impacts and appropriate responses should be obtained, overall and in relation to specific activities and local area interventions.*
- *Programme design should ensure that participants, including target groups, should be prompted to consider and integrate gender issues at all stages, levels and in all interventions.*
- *The education HIV/AIDS programme should solicit specialist input on gender issues in planning and implementation wherever feasible.*

5.2 Financing and resource allocation

Continued expansion of access and quality of education In Namibia has been increasingly hindered by financial constraints on the sector and government as a whole. Namibian expenditure on education is high by international standards at 9.4% of GNP and 21.3% of the government budget. This means that potential for greater diversion of resources from general government revenue is likely to be

⁸⁷ Aspects of EMIS roles in monitoring of HIV/AIDS impacts and responses are considered in Annex C.

limited. In addition, the very high proportion of education expenditure on personnel limits flexibility to reallocate within education budgets to respond to new needs and non-personnel line items.

Finances for HIV/AIDS and other special programmes have often not been as constrained as for other education activities due to availability of donor assistance. However, as indicated in this assessment, greater resources are needed to ensure that HIV/AIDS is mainstreamed adequately across education components, as well as achieve adequate coverage and intensity of programmes.

There are several strong arguments for greater prioritisation of HIV/AIDS activities in resource allocation at all levels.

- HIV/AIDS creates the single greatest inefficiency in the education system. Premature death of learners and employees due to HIV/AIDS at current infection rates probably will amount to loss of over a quarter of the national investment in education. Actively preventing and managing HIV/AIDS impacts is in itself an investment.
- HIV/AIDS is an enduring problem that will lead to various other costs to the system beyond this decade and investment in impact management now will generate long term benefits.
- The education sector has a unique role to play in the national HIV/AIDS response. It is Namibia's largest employer and thus a core of the national response to impacts in the workplace. In addition, it has the nation's most extensive organizational network, professional capacity to combat HIV/AIDS and unique, daily contact with millions of at risk and vulnerable children.
- HIV/AIDS will reduce the community resources and capacity for education particularly in the most disadvantaged communities, thus undermining key equity objectives of the sector.
- As illustrated in this assessment, many key responses to HIV/AIDS are likely to be "affordable" if they are given appropriate priority over time. Some costs particularly related to management of staff impacts, may become significant additional demands on budgets. However, costs of impacts and responses are unlikely to be extremely large as a proportion of education expenditure and will climb gradually. They should thus be amenable to gradual re-prioritisation of programmes and expenditure within and across sectors.

Recommendations – resource allocation

Improved levels of funding of HIV/AIDS responses are required at all levels. The goal should be to incorporate most HIV/AIDS-related activities into core budgets and functions in the longer term. However, initial extra investment is likely to be necessary to develop and disseminate knowledge, develop capacity and devise systems to respond to HIV/AIDS. Recommendations on resource allocation to deal with fiscal constraints and maximize effectiveness include the following.

- *Develop a specific resource mobilisation strategy* to ensure adequate funding for HIV/AIDS activities. This should consider not only short term funding requirements, but also ways to gradually increase availability of resources over time to cope with rising HIV/AIDS related needs.
 - *Develop strategy to create budgetary space to cover key HIV/AIDS related costs over the next decade.* The major source of potential space has to be assumed to be closer management of personnel related costs in the absence of increasing government revenue. In partnership with OPM, PSC, Finance and unions, consider ways to incrementally to ensure there are sufficient finances to cover major system costs such as increasing medical aid contributions, relief teacher systems and posts for guidance and counselling teachers.⁸⁸
 - *Prioritize and reallocate existing capacity away from less urgent matters or less cost effective programmes in the sector.* Planners and political leadership need to seriously consider this. Continued spending on inefficient, less urgent or inequitable uses is now more difficult to

⁸⁸ Options may for example, include reaching agreement with unions and other sectors to gradually divert a certain component of potential wage increases towards building contingency funds to deal with some of the costs related to managing impacts on employees.

defend if it means that the large impacts HIV/AIDS impacts on system performance are not addressed.

- *Consider a general requirement that all education components down to school level should allocate a certain percentage of their budgets to a HIV/AIDS vote linked to specific activities and outputs.*⁸⁹ This could encourage mainstreaming of HIV/AIDS in activities and budgets and relieve pressure for allocation of extra resources. *Encourage pooling of budgets for combined activities* across units and institution where this will help to increase viability of responses, reduce duplication and maximize synergy.
- *Consider mobilizing funding under new provisions for a fund under the new Education Act for particular needs such as OVC support.* Support from donor or general government revenue for a well motivated use of funds may be possible.
- *Compete boldly for donor or other HIV/AIDS programme funds to support establishment of new programmes, systems and capacity.* The expanded response proposed for education is a critical part of the national strategy to respond to workplace, prevention and vulnerable children needs. *Consider developing applications to the Global Fund* on HIV/AIDS to support education sector initiatives on prevention and impact mitigation. However it will also be important to *avoid over-reliance on donors*. Donor funding is likely to be too limited for coverage of sufficient numbers of schools and functions. HIV/AIDS activities have to become core functions for the sector. Sustainability may be compromised if they cannot rely on government funding in the longer term.
- *Increase priority of funding of programmes and functions that are already seen as important and are also relevant to the HIV/AIDS response.* Examples include management development, cluster initiatives, and strengthening human resource management capacity and systems.
- *Manage programme resource allocation to ensure maximum benefits from available resources.*
 - *Prioritise funding of posts and other basic requirements at all levels to drive the sector's response.* Without core capacity and inputs such as transport success will be limited.
 - *Prioritise spending on HIV/AIDS activities that can provide good indications of cost effectiveness and efficiency* in producing the greatest effect per dollar spent when compared to other options. This may require consideration of supporting NGO or other partners rather than direct provision of services by the Ministries themselves.
 - *Target resources at the most vulnerable communities, learners, schools and aspects of education.* These include focus on rural and other disadvantaged communities and schools, key vulnerable functions and particular vulnerabilities of the girl child and female educators. Targeting is likely to be particularly important for programmes such as nutritional support and subsidies to compensate for lower levy income, for example.
 - *Focus on interventions and resources with "multiplier effects".* Priority needs are likely to include greater focus on *system development* to use existing resources more effectively, rather than over-emphasis on capacity development and training. In the Namibian context, priorities are likely to include: more efficient communication and administrative systems; development of good guidelines and tools for new programme priorities that allow decentralised activity; improved transport related systems to facilitate networking and access to key partners such as social services; and systems and activities to disseminate examples of best practice.
 - *Consider innovative approaches* such as an incentive fund to stimulate and support planning and implementation of HIV/AIDS activities by individual regions, clusters or schools.
- *Closely monitor and where necessary review fee and levy systems* that may undermine effectiveness of programmes in responding to the needs of the most vulnerable. Relevant programmes include normal schooling, ECD and NAMCOL. Greater allocation of resources to address impacts of fees and levies on education access may be more important than many other HIV/AIDS specific responses.

⁸⁹ This is consistent with the Ministries current emphasis on encouraging all Divisions and components to integrate HIV/AIDS into their plans.

6. Overall conclusions and recommendations

Since independence, Namibia has made important achievements in economic and human development. The HIV/AIDS epidemic has profoundly changed the internal and external environment of the education sector. The epidemic threatens to obstruct further progress and undermine gains already made by society and the education sector. Impacts of HIV/AIDS are expected to increase and accumulate well beyond the end of this decade.

Most importantly, at current infection rates, over one quarter of the nation's investment in education could be lost through premature AIDS illness and deaths among today's learners and students. HIV/AIDS is also exacerbating negative socio-economic and other influences on learners, and compounding weaknesses in ability to deliver quality and accessible education. Impacts are likely to disproportionately affect communities and individuals that are already disadvantaged, obstructing attempts to improve equity. In any single year, HIV/AIDS alone seems unlikely to destabilize the whole system. However, this hides insidious effects on quality and access, as well as severe impacts on many schools and many thousands of infected and affected employees and learners.

Future assessments of the adequacy of Namibia's response to the epidemic are likely to be based largely on whether it has preserved the lives, development potential and rights of the current generation of children and youth. The education sector represents the nation's largest investment in development, and is uniquely placed and essential to ensure a successful national response to these challenges.

There is urgency to act on opportunities for effective action to mitigate the current, immediate impacts of the epidemic, but also to lay foundations to combat longer-term impacts that may not yet be visible.

HIV/AIDS has to be recognised as “*core business*” for the whole education sector for the foreseeable future. All components of education are affected and have roles to play in protecting the system from HIV/AIDS impacts. “*Mainstreaming*” of HIV/AIDS within all components of the education sector and at all levels is imperative to address HIV/AIDS effectively. All Directorates and institutions must actively integrate HIV/AIDS into their strategies and actions. Responsibility cannot be abdicated to the proposed HIV/AIDS Unit, other HIV/AIDS programmes or other sectors.

Importantly, *HIV/AIDS presents opportunities not just a threat*. Many aspects of HIV/AIDS responses are consistent with existing priorities, programmes and initiatives to strengthen education independent of HIV/AIDS. HIV/AIDS reinforces the urgency to address them and creates opportunities to mobilise support to remove obstacles to efficient implementation.

The following overall recommendations are made around developing a more effective sector response.

1. **Reinforce leadership commitment.** Sustained, high profile political, managerial and professional leadership across all components and levels of the education system is critical for effective responses to HIV/AIDS. Leadership is needed to inspire staff, provide guidance, and ensure that action occurs. In some regions, commitment of counselors and governors was noted to be a major factor predicting success of RACOCs and RACEs. However, current levels of leadership

awareness and commitment vary across the sector. Leadership commitment is not high or sustained enough at many levels and in many areas to ensure effective responses.⁹⁰

2. ***Actively combat stigmatization, secrecy and denial around HIV/AIDS.*** These problems are widespread and profoundly undermine responses to impacts on the system and individuals. Addressing them requires active participation of leadership as often as possible, as well as systematic creation of opportunities for open discussion of HIV/AIDS issues at all levels and in all institutions.
3. ***Strengthen HIV/AIDS programme capacity and structures.*** This is a priority issue to ensure an effective response to the epidemic.
4. ***Define roles and accountabilities*** of various education components and players, and ***develop guidelines*** on various aspects of action. Many HIV/AIDS challenges, including critical issues such as HIV prevention and support of vulnerable children, are new additions to traditional roles. Many role players are unlikely to act without clear definition of their responsibilities.
 - *Development of practical guidelines* is an urgent priority to guide decentralized action in many areas as soon as policy and strategy are confirmed in various areas.
 - *Review of education and other regulations, legislation and codes* in a number of areas will be a prerequisite for appropriate action by officials.
5. ***Disseminate knowledge across the sector and include positive messages.*** Basic knowledge of educators and managers is often inadequate, and many have little idea of what can be done. Communication of information on key aspects of HIV/AIDS prevention, impacts, planning, strategy and best practice is needed to mobilize and sustain responses. Fatalism around HIV/AIDS and other stresses on education stakeholders make it critical to communicate positive messages of commitment, hope and practical steps that can be taken.
 - *Establish mechanisms to network and share experience* and best practices between schools, clusters, regions, MBESC planners and other sectors.
 - *Reinforce previous initiatives to communicate key aspects of education HIV/AIDS policy and strategy* to regional, cluster, school and institutional level.⁹¹
6. ***Ensure decentralised approaches.*** Avoid a “top down” approach to developing and implementing responses to HIV/AIDS. Effective action on HIV/AIDS does require clear guidance from a central strategic framework and some aspects of action require solutions led from the MBESC and MHETEC.⁹² However, the overall response depends on motivation and action at school, cluster and regional level. Centralised capacity, capabilities and models are unlikely to be able to cope with the diversity of circumstances in schools and the scale of the challenge.
 - *Focus on facilitating cluster and school level responses as a major part of initial strategy.* The cluster system seems to provide a model to facilitate decentralised initiative and overcome capacity and other constraints.⁹³
 - *Address organisational culture.* A successful sectoral response to HIV/AIDS will to a large extent depend on cultivating caring and willingness of individuals and groups to embrace the challenge, and respond to needs of colleagues and learners. Bureaucratic traditions and

⁹⁰ A number of informants felt that verbal commitment was often not backed up by active allocation of time, development of leadership HIV/AIDS expertise and allocation of resources to reinforce programmes.

⁹¹ In the school survey, only 16% of heads were aware of a policy or strategy on HIV/AIDS for schools.

⁹² Examples include review of the employment framework, curricula and development of a range of policies and guidelines.

⁹³ Some HIV/AIDS activities have already been initiated by clusters of schools and the Basic Education Project.

tendencies to avoid personal initiative should also be combated. As one official remarked “ *If there is no caring community, there is no learning community*”.

7. ***Ensure flexibility to deal with uncertainty.*** Many aspects of HIV/AIDS impacts and appropriate responses remain uncertain, and large variations between schools and circuits should be anticipated. “Least risk” scenario planning approaches should be used in areas where important uncertainties exist, for example, around levels of impacts on teacher and student numbers. A key consideration in planning and practice should be how to ensure flexibility in education system management to allow creative, service orientated responses to unforeseen needs or circumstances.
8. ***Develop inter- and intra-sectoral co-ordination and partnerships.*** Many aspects of the responses to impacts of HIV/AIDS on educators and learners require cooperation across education components and with other sectors. It is critical that education sector role players avoid a “silo” mentality in approaching HIV/AIDS issues, and are bold in approaching other stakeholders. However, they must also avoid tendencies to simply “pass the buck” to others.
 - *NGOs and community organisations* are key partners. They often have capacity and expertise that is not available within government, as well as flexibility to respond rapidly and innovatively. Improved coordination and integration of strategy at all levels is required with them, as well as stronger support from government to ensure their sustainability. The education sector may well become the most appropriate locus for functional coordination of government partnerships with NGOs around youth HIV prevention and vulnerable children issues.
 - *Coordination with other sectors*, particularly NACOP, MOHSS, Local Government, Women Affairs and Child Welfare, OPM, PSC and Finance will be critical at all levels for efficient strategy and use of available resources.
 - Give particular attention to *supporting efforts to strengthen social security systems and increase their efficiency.*
 - *Better co-ordination across Directorates and units* within the Ministries are needed, for example on the role of Human Resources in workplace programme development and the role of SEU in the programme and school responses.
 - *Co-ordination with unions.* Namibia’s teacher and other public service unions are increasingly aware of the impact of HIV/AIDS on members and society. However, their members may resist important aspects of change and new roles required in the education sector, and certain aspects of workplace policy and programmes need to be negotiated. Liaison with unions to present a combined front to the epidemic will thus be important.
 - *MBESC must strengthen its own HIV/AIDS resources, mandate and management systems* if it is to ensure effective inter- and intra-sectoral action.
9. ***Refine the HIV/AIDS strategic and operational plans.*** The current Education Sector HIV/AIDS Strategic Plan defines key processes to develop more concrete plans and actions in many areas. However, knowledge around HIV/AIDS issues and experience of challenges to implementation has increased since it was developed.
 - *Review the Strategic Plan* with particular emphasis on (a) strengthening its approach in areas such as support for vulnerable children, and responses to impacts on employees and system function and, (b) providing new details on strategy in various areas to enable it to be a practical guide for decentralised action and implementation.
 - *All MBESC Divisions and Units* should refine or develop their HIV/AIDS strategic and operational plans and integrate HIV/AIDS considerations into their general plans.
 - *School, Cluster and Regional HIV/AIDS plans* should be developed or refined with adequate guidance and support.⁹⁴

⁹⁴ In the school survey, 27% of principals said their schools had developed their own approach or plan to managing HIV/AIDS impacts, often independent of knowing of any policy or strategy from national level.

- 10. Reinforce existing programmes and activities that are relevant to managing HIV/AIDS.** Many current initiatives (e.g. management development, reinforcing skills of teachers, cluster development, medical aid review) will enhance ability to respond to the challenge of HIV/AIDS. They are critical to stabilize the overall education system to deal with HIV/AIDS and other stresses. However, HIV/AIDS introduces new vulnerabilities and needs in many of these areas that need to be factored into planning.
- 11. Improve information and monitoring of impacts and responses.** HIV/AIDS prevention and impact management is hampered by lack of good information.
- Review and strengthen *EMIS and other routine information and reporting systems* to monitor HIV/AIDS impacts and implementation of HIV/AIDS programmes.
 - Consider possibilities for *more decentralised management information generation and use*, to inform responses to HIV/AIDS. Clusters have proved to be very effective instruments for gathering statistics quickly.
 - *Participatory and qualitative information gathering* are required, along with *specific research* projects, in addition to routine statistics.
- 12. Develop strategy on resource allocation and mobilisation.** In the short term, investment is needed in dedicated budgets and capacity at institution through to Ministry level in order to mobilize, support and coordinate effective responses to HIV/AIDS. In the medium to longer term, it should be possible to incorporate most HIV/AIDS-related responses into core budgets and functions. Gradual re-prioritisation of programmes and expenditure within and across sectors seems feasible as estimates of most costs indicate that they are unlikely to be extremely large as a proportion of education expenditure and will climb gradually.
- *Motivate boldly for donor and government funding* for education sector HIV/AIDS initiatives. A strong response by education is likely to have more effect on the epidemic and development outcomes than many competing initiatives.
 - *Considerations to ensure affordability and cost effectiveness include: targeting of resources* to address the most vulnerable stakeholders and aspects of delivery; *focus on interventions and resources with multiplier effects*, and *innovative approaches such as an incentive fund programme* to support decentralised development of HIV/AIDS activities.

However, it was clear from visits to schools that many school plans often had difficulty in identifying and dealing with all the relevant issues.

Annex A: Acknowledgments

This study benefited from active support and participation from a many education sector stakeholders. The following paragraphs attempt to recognise their valued contribution. The team regrets any inadvertent omissions or errors.

The impact assessment team thanks the leadership of the MBESC and MHETEC for their commitment to facilitating the undertaking of this study and the dissemination of the findings. We extend our gratitude to the Honourable Ministers J. Mutorwa and N. Angula, Deputy Ministers C. Bohitile and B Wentworth , and Permanent Secretaries L-N Katoma and V Ankama.

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Regional Directors of Education, RACE Committee members, and Governors provided key support to ensure that visits to their regions were successful and made valuable inputs during key informant interviews.

The team would also like to thank the stakeholders who participated in report back workshops and gave useful feedback for consideration in taking forward recommendations.

The following institutions and individuals were visited in the regions.

Windhoek, Gobabis, Marienthal

- Martti Ahitsaari Primary School

- Ella Du Plessis Secondary School
- Nossobville Primary School: Gobabis
- Wennie Du Plessis Secondary School : Gobabis
- Emphelheim Secondary School: Marienthal
- Sonop Primary School, Marienthal
- RACOC Gobabis - Mr. Kavenji,
- Mariental Regional School Counsellor Mr Diederichs
- Mariental Women and Child Protection Unit
- RACOC Marienthal Mr. Peters
- Windhoek: NAMCOL, Catholic AIDS Action, TRC, UNFPA, YHDP, Council Of Churches of Namibia, Youth Council, NASOMA
- Windhoek RACE - Mrs. George and Mrs Nangola
- Karas Regional School Counsellor, Marienthal

Walvis Bay and Swakopmund

- Hermann Gmeiner Technical High School
- Duinesig Senior Primary School
- Kuisebmond Secondary School
- Ms. Elena de Castro, RACOC Co-Ordinator, Walvis Bay
- Ms. Lisel, Social Worker, Usakos

Ondangwa West

- Mr. G. Tshigua, Regional Director, Ministry of Education
- RACE Committee chaired by Mr. Mushilaa
- Mrs. H. Kashupi, Deputy Chairperson of RACOC, Ondangwa
- Oshihenge Combined School (Interviews held at Primary and Secondary)
- Unona Secondary School
- Iipumbu Secondary School, Oshakati
- Ms. Bertha Kalenga, Child Protection Unit, Ministry of Health, Social Services Division.
- Ms. Helen Anjaba- Chief Social Worker, Oshana
- Ms. Louisa Kaudenge, Field Social Worker (Juvenile Justice), Ministry of Health, Social Services Division.
- Mr. Eddie Bezhuizenout, Circuit Inspector, Oshakati
- Catholic AIDS Action
- Youth Directorate (My Future My Choice)

Ondangwa East

- Okankolo Combined School
- Onguti Senior Secondary School
- Enhaana Primary School, Eenhana
- Haimbili Haufiku Secondary School, Eenhanna
- Mr. B.K. Mwaninigange (Governor, Ohangwena Region).
- Mr. Shivute, Co-Ordinator for HIV/AIDS & Mr. Ngodji, Executive Secretary, Evangelical Lutheran Church in Namibia (Eastern Diocese), Oniipa
- RACE and regional office members including Mr. Haihambo, Laubser, Kutambo.
- RACOC representatives and Governor from Ohangwena
- Regional Director and senior management team members
- Women's Affairs and Child Development, Eenhana Mrs R Kayuo,
- Red Cross, Eenhana

Rundu

- Mr. Kandema, Regional Director
- Ms. Caley, Senior Education Officer
- RACE Committee chaired by Mrs. Caley and Mr. Dikuua
- Mr. Vincent Likoro, Co Secretary, RACOC

- Martin Ndumba Combined School, Mukwe
- Max Makushe Secondary School, Mukwe
- Kehemu Senior Primary School
- Rundu Secondary School
- Mr. Kapepero, Circuit Inspector, Rundu
- Detective Naftali Hausiku Haipara, Police (Women and Child Protection Unit)
- Mrs. Maria Katiku, Senior Social Worker, Ministry of Health and Social Services
- Pastor John Sindano, Evangelical Lutheran Church in Namibia
- Catholic AIDS Action
- Interview with Traditional Leader
- Meeting with NANAWO

Katima Mulilo

- Mr Sinvula, Regional Director
- Caprivi Senior Secondary School
- Ngweze Primary School,
- Simataa Secondary School, Simataa
- Chichimani Primary School, Simataa
- Mafwila Secondary School, Ngoma
- Ngoma Primary School, Ngoma
- Catholic AIDS Action
- Mrs. Mavengane, Katima Social Services
- RACOC chair - Governor Sibalatani
- RACE Committee
- YHDP, Katima Mulilo
- Caprivi College of Education students
- NAMCOL, Katima Mulilo
- Senior Inspector, Mr. Johann Kotze

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Annex C: Methodology for projections and issues in interpreting projections

An important component of this impact assessment is the demographic projections. The projections have a number of key uses for education planners and managers:

- They allow some prediction of trends in the number of children available to enter the education system. This is important because we know that AIDS causes a reduction in the number of children as result of the decline in the number of women of childbearing age; the decrease in fertility among HIV-positive women; and increased mortality among children as a result of AIDS.
- Projections can tell us the potential number or proportion of children who are ill with AIDS, or who are infected with HIV.
- It is possible to predict the number of children who will be orphaned by AIDS.
- We can use demographic projections to estimate the number of teachers infected with HIV, or who will be ill and die due to AIDS.

However, demographic projections are based on mathematical models, and a number of questions need to be considered when assessing the reliability of the projections. These include:

- How good is the data that is used to go into the model (e.g. census data as a baseline to produce the basic demographic projections, the antenatal HIV Sero Survey data)?
- What assumptions and methodology were used to generate the projections (e.g. how long someone will be infected with HIV before they develop AIDS)?
- What different scenarios were produced, and what was the rationale for these scenarios?

The projections that have been produced can be expected to give a reasonable indication of the absolute and relative magnitude of the impacts of the HIV/AIDS epidemic. However, models are only a simulation of the real world. They cannot be guaranteed to predict a complex reality perfectly, and are critically dependent on the input data used in them.

Full sets of demographic projections in electronic format are available for planners on request.

Key features of the Model

The model used to produce estimates of demographic impacts of HIV/AIDS for this report is the most up to date version of the Metropolitan Life/ Doyle model. This model has been used for a number of other studies in the region. In both South Africa and Botswana the model has been able to predict the course of the HIV and AIDS epidemics with some success.

The model combines features of a macro-simulation model and a micro simulation programme. A macro-simulation model is calibrated in terms of inputs at a macro level, such as the reported HIV prevalence level from the annual antenatal survey. Pure macro-simulation models rely on inputs that can be very broad, and seek to extrapolate from national or regional surveys. They are therefore not directly defensible except through confirmation of the results they produce.

A micro-simulation model is built on comprehensive, scientifically defensible input parameters which consider the risk behaviour of individuals within a given population and aggregate their effects to produce projections of HIV/AIDS for whole groups or populations, through complex iterative

calculations. Pure micro simulation models depend on a range of input parameters, for which there is often little reliable information. They can also have difficulty in producing reliable projections.

Combination of features of a macro and micro model thus make the Metropolitan Life model robust and better able to produce reliable medium and longer term projections at a macro level without losing sensitivity to underlying micro parameters which may be relevant to particular sub-populations. The epidemic in a province, region or the whole country is assumed to be an aggregation of many sub-epidemics in particular population sub-groups. Each of these is defined by its unique demographics (e.g. gender, age profile), its geographic location and the timing of the epidemic in the area relative to other areas, and risk in terms of sexual behaviour patterns.

Of crucial importance to the projections is the notion that the epidemic moves through a population through interaction between various risk groups. Four behavioural risk groups are defined in the model: commercial sex workers and frequent clients; other people with high incidence of sexually transmitted diseases; people at risk of infection; and people not at risk of infection. Sub-epidemics are initially fed by infected persons from outside a community and then multiply through contact between people in these risk groups.

In order to obtain a better estimate of demographic impacts in sub-populations of interest, independent projections for each region were made. Furthermore, separate projections are made for each age and gender group in each region. These are then aggregated to produce national projections. The shape and timing of the epidemic curve in different regions are assumed to be different and are based on Antenatal Sero Survey data. Some adjustment of assumed HIV/AIDS risk was made to accommodate likely differences between major population groups.⁹⁵

The methods used to produce the basic demographic projections and the projections for the impact of the epidemic on teachers are discussed in greater detail below.

Demographic parameters used in projections

The population distribution data was derived from the Namibian census and the latest intercensal calculations. Fertility and mortality data were taken from the Demographic and Health Surveys from 1992 and 2000.

One of the difficulties in demographic modelling is that the data relating to the age distribution of the population, the mortality by age in the population, and fertility, all have to be consistent. Relatively small inconsistencies in data can, when used in modelling, result in “steps” in the age profile in future or past years, and distort the modelling exercise. While these inaccuracies are in proportionate terms quite small, they are very visible and may distort analyses at a disaggregated level. This problem did arise in modelling the Namibian population. The calibrations that were changed most from the original “ideal” (based on data) in the exercise, were fertility numbers.

⁹⁵ In the absence of such adjustments, it is likely that projections would over-estimate HIV/AIDS impacts on the Namibian population and sub-populations such as educators. The intention of including race in the modelling exercise is to most accurately reflect the impact of the epidemic, not to highlight race as an issue. In South Africa, which has a similar history of racial and economic discrimination to Namibia, race has been found to be a crude but important proxy for various social and economic inheritances that have a strong influence on HIV risk. Historically more privileged Namibians are likely to be under-represented in the public sector antenatal HIV Sero-Survey. In the absence of such data in Namibia, 11% of the Namibian population was assumed to fall into lower HIV/AIDS risk population groups and the epidemic in this sub-group was calibrated in terms of demographic and HIV risk parameters derived from the “white” and “mixed race” data available in South Africa,.

Population Age and Sex Profile

The following population age-sex profile was used:

POPULATION DISTRIBUTION at input year = 1993					
Age	male	female	Age	male	female
0	0.0171	0.0169	40	0.0038	0.0039
1	0.0161	0.0161	41	0.0038	0.0039
2	0.0158	0.0158	42	0.0038	0.0039
3	0.0155	0.0155	43	0.0037	0.0038
4	0.0153	0.0154	44	0.0036	0.0036
5	0.0152	0.0153	45	0.0034	0.0034
6	0.0152	0.0153	46	0.0031	0.0030
7	0.0150	0.0153	47	0.0030	0.0028
8	0.0147	0.0150	48	0.0028	0.0026
9	0.0141	0.0145	49	0.0028	0.0027
10	0.0134	0.0138	50	0.0028	0.0029
11	0.0126	0.0130	51	0.0029	0.0032
12	0.0119	0.0122	52	0.0031	0.0034
13	0.0113	0.0116	53	0.0030	0.0035
14	0.0108	0.0113	54	0.0030	0.0035
15	0.0105	0.0110	55	0.0030	0.0035
16	0.0103	0.0109	56	0.0028	0.0032
17	0.0099	0.0106	57	0.0027	0.0032
18	0.0096	0.0104	58	0.0028	0.0030
19	0.0092	0.0099	59	0.0027	0.0031
20	0.0087	0.0095	60	0.0030	0.0032
21	0.0082	0.0090	61	0.0033	0.0034
22	0.0078	0.0085	62	0.0035	0.0036
23	0.0074	0.0081	63	0.0035	0.0036
24	0.0070	0.0076	64	0.0035	0.0034
25	0.0067	0.0072	65	0.0032	0.0031
26	0.0064	0.0069	66	0.0030	0.0028
27	0.0061	0.0064	67	0.0025	0.0025
28	0.0059	0.0061	68	0.0022	0.0021
29	0.0056	0.0058	69	0.0022	0.0020
30	0.0054	0.0056	70	0.0021	0.0020
31	0.0052	0.0055	71	0.0023	0.0020
32	0.0052	0.0053	72	0.0022	0.0022
33	0.0050	0.0050	73	0.0024	0.0025
34	0.0048	0.0049	74	0.0022	0.0025
35	0.0045	0.0046	75	0.0020	0.0025
36	0.0044	0.0044	76	0.0017	0.0022
37	0.0041	0.0042	77	0.0015	0.0019
38	0.0040	0.0040	78	0.0013	0.0017
39	0.0039	0.0040	79	0.0011	0.0015

The following is a comparison of the 1991 and 1983 populations. The 1983 population is derived off the 1991 population by back-calculating using fertility and mortality assumptions (1983 relates to the detail given above).

Population Distribution 1991(Given) vs 1983(Calculated)				
Age Group	1983		1991	
	Male	Female	Male	Female
0-4	0.0799	0.0798	0.0696	0.0669
5-9	0.0742	0.0754	0.0660	0.0630
10-14	0.0600	0.0620	0.0609	0.0588
15-19	0.0495	0.0528	0.0548	0.0544
20-24	0.0391	0.0427	0.0478	0.0495
25-29	0.0306	0.0323	0.0404	0.0436
30-34	0.0256	0.0263	0.0343	0.0378
35-39	0.0209	0.0212	0.0286	0.0320
40-44	0.0187	0.0191	0.0233	0.0260
45-49	0.0151	0.0144	0.0184	0.0206
50-54	0.0148	0.0164	0.0141	0.0163
55-59	0.0140	0.0160	0.0106	0.0128
60-64	0.0168	0.0172	0.0077	0.0098
65-69	0.0130	0.0125	0.0056	0.0076
70-74	0.0111	0.0111	0.0041	0.0060
75-79	0.0076	0.0098	0.0034	0.0051

Mortality

The base mortality data used for the projections are given below. This calibration is derived of existing mortality tables for South Africa, adapted to Namibian data collected in the Demographic and Health surveys from 1992 and 2000 on age-specific mortality, life expectancy and infant mortality.

MORTALITY						
Age	male	female		Age	male	female
0	0.0453	0.0329		45	0.0096	0.0077
1	0.0033	0.0030		46	0.0106	0.0086
2	0.0019	0.0016		47	0.0116	0.0095
3	0.0017	0.0014		48	0.0128	0.0105
4	0.0014	0.0011		49	0.0141	0.0114
5	0.0010	0.0009		50	0.0156	0.0124
6	0.0008	0.0007		51	0.0173	0.0135
7	0.0007	0.0007		52	0.0192	0.0146
8	0.0006	0.0006		53	0.0212	0.0159
9	0.0004	0.0005		54	0.0235	0.0173
10	0.0004	0.0005		55	0.0260	0.0188
11	0.0004	0.0005		56	0.0287	0.0206
12	0.0006	0.0006		57	0.0316	0.0225
13	0.0009	0.0007		58	0.0348	0.0248
14	0.0013	0.0008		59	0.0381	0.0273
15	0.0017	0.0010		60	0.0418	0.0301
16	0.0022	0.0011		61	0.0457	0.0331
17	0.0026	0.0012		62	0.0498	0.0363
18	0.0031	0.0014		63	0.0543	0.0396
19	0.0035	0.0015		64	0.0591	0.0430
20	0.0039	0.0016		65	0.0641	0.0465
21	0.0042	0.0016	66	0.0695	0.0502	

22	0.0044	0.0017		67	0.0752	0.0542
23	0.0045	0.0017		68	0.0811	0.0585
24	0.0046	0.0018		69	0.0874	0.0632
25	0.0045	0.0018		70	0.0942	0.0684
26	0.0043	0.0020		71	0.1016	0.0745
27	0.0042	0.0020		72	0.1098	0.0816
28	0.0041	0.0021		73	0.1191	0.0899
29	0.0040	0.0022		74	0.1294	0.0996
30	0.0040	0.0022		75	0.1404	0.1104
31	0.0041	0.0023		76	0.1516	0.1221
32	0.0042	0.0024		77	0.1624	0.1342
33	0.0043	0.0026		78	0.1722	0.1465
34	0.0045	0.0027		79	0.1810	0.1589
35	0.0047	0.0029		80	0.1900	0.1724
36	0.0049	0.0032		81	0.2006	0.1882
37	0.0052	0.0034		82	0.2146	0.2075
38	0.0055	0.0037		83	0.2374	0.2344
39	0.0059	0.0041		84	0.2613	0.2636
40	0.0063	0.0045		85	0.2894	0.2974
41	0.0068	0.0050		86	0.3209	0.3354
42	0.0074	0.0055		87	0.3549	0.3772
43	0.0081	0.0061		88	0.3899	0.4218
44	0.0088	0.0069		89	0.4243	0.4684

Life expectancy at birth relating to the above tables would be the following:

	Life Expectancy at Birth (without AIDS)
Male	58.70
Female	63.19

Fertility

The age specific fertility rates used are the following:

Fertility				
Age	1983	1993	2003	2013
Total	5.6242	5.0171	4.2183	3.489
10 to 14	0.000	0.000	0.000	0.000
15 to 19	0.609	0.526	0.437	0.358
20 to 24	1.132	1.011	0.848	0.703
25 to 29	1.196	1.078	0.908	0.756
30 to 34	1.043	0.940	0.792	0.658
35 to 39	0.837	0.749	0.631	0.521
40 to 44	0.584	0.518	0.436	0.359
45 to 49	0.223	0.196	0.165	0.135
50 to 54	0.000	0.000	0.000	0.000
55 to 59	0.000	0.000	0.000	0.000

Migration

Migration was not considered in national or regional projections.

HIV/AIDS epidemiological parameters and assumptions

The epidemic in Namibia appears to be considerably more complex than a national overview might suggest. The epidemic in the far north and north-east appears to be the most severe and to have started earlier than in the rest of the country. Also very severe are some urban areas outside of the north. The epidemic in the central parts appears to be somewhat less severe, though high, while the south and south-east seem to have lower level epidemics.

These differences could not be sufficiently described by one model with time-based leads or lags. Plateaux of HIV prevalence in different regions appear to be at very different levels, the rate of increase of the various epidemics is very different at various stages, starting times vary, and the ultimate shape of the epidemic curves for different sites vary to a large extent.

It was decided to attempt to classify regions according the patterns of epidemic that they seem to be experiencing, then model each region individually. This would allow us to express the epidemic at a specific site as an aggregation of models or as being similar to a specific individual model. We could then, by combination, and by consideration of the representativeness of the various sites, model regions and urban or rural sites according to what seems most appropriate. The same base demographic calibrations were used for all the models as attempts to customize demographic parameters for each region would be likely to suggest spurious accuracy given data limitations.

The following process was followed in developing the projections.

The antenatal clinic sero-prevalence survey sites were grouped into three major groupings:

	Site	1992	1994	1996	1998	2000			Plateau
high	oshakati	4	14	22	34	28	very high	urban	
	walvisbay				29	28	high	urban	
	katima mulilo	14	25	24	29	33	high	urban	
	windhoek	4	7	16	23	31	high	urban	
	modelled	7.3	15.3	20.7	28.8	30.0			33
medium	engela		7	18	17	23	medium/high	rural	
	onandjokwe		8	17	21	23	medium/high	rural	
	swakopmund	3	7	17	15	22	medium/high	mix	
	nyangana		6	5	10	16	medium	rural	
	otjiwarongo	2	9	12.5	16	18	medium	urban	
	nankudu				13	18	medium	rural	
	keetmanshoop	3	8	7.5	7	17	medium	mix	
	modelled	2.7	7.5	12.8	14.1	19.6			22
low	andara		2	11	16	15	medium/low	rural	
	rundu		8	8	14	14	medium/low	urban	
	gobabis	1	4	6	9	9	low	rural	
	opuwo	3	1	4	6	7	low	rural	
	modelled	2.0	3.7	7.3	11.3	11.3			12

Four models were fitted: 405 to the national prevalence rates, 406 to the high HIV epidemic pattern as above, 404 to the medium pattern as above, and 403 to the low pattern as above. The antenatal HIV infection levels projected by each model are shown in the following table.

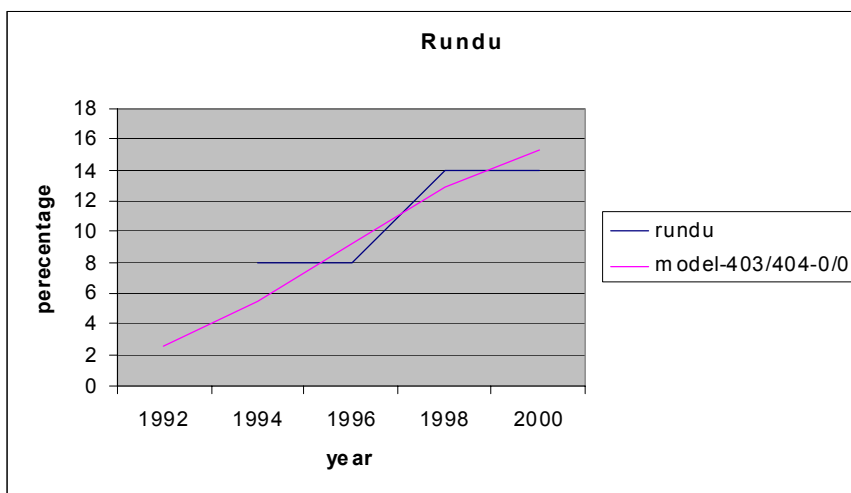
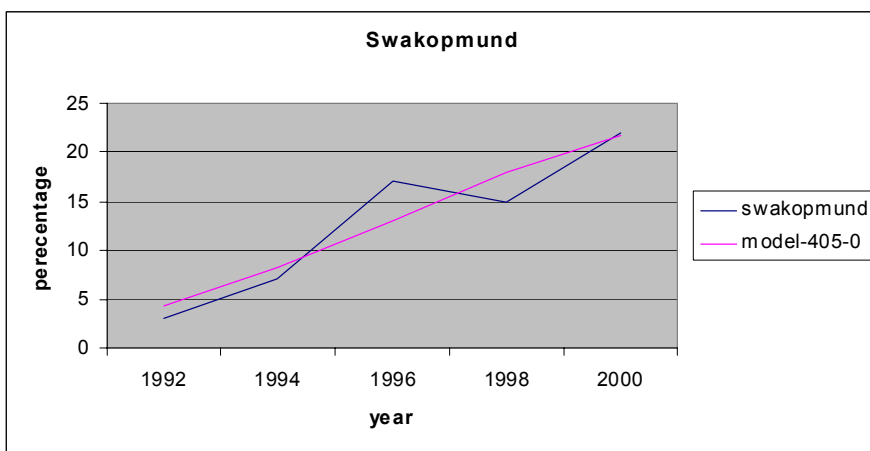
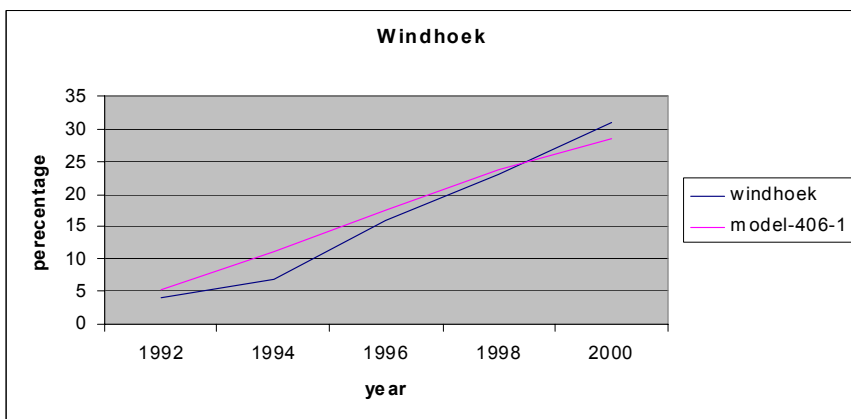
	lag	1992	1994	1996	1998	2000
model403	0	1.8	4.4	7.5	10.1	11.4
model404	0	3.2	6.5	10.9	15.5	19.2
model405	0	4.4	8.3	13.1	18.0	21.7
model406	0	8.1	14.2	20.8	26.6	30.4

Each sero-prevalence site was then compared to the four models produced, and was fitted to an aggregation of the models above. The following are the models or aggregations of models allocated to each site.

Site	Models Used		Lags Used (yrs)	
	#1	#2	#1 lag	#2 lag
oshakati	406		0	
walvisbay	406		0	
katima mulilo	406		-1	
windhoek	406		1	
engela	406	404	1	0
onandjokwe	406	405	1	0
swakopmund	405		0	
nyangana	404		2	
otjiwarongo	404		0	
nankudu	404		1	
keetmanshoop	404		2	
andara	404		1	
rundu	403	404	0	0
gobabis	403		1	
opuwo	403		3	

The sites were then classified as urban or rural. Where a site was urban and no rural sites in a region was available, rural sites in the same region were assumed to reach a plateau at 80% the level of urban sites. Where a site was rural and no urban were available, urban sites were assumed to be 20% higher than rural sites at plateau.

For each region, a rural pattern and urban pattern was thus modelled. The final regional epidemics were modelled by combining urban and rural by proportion in that region. Some examples of the way the antenatal prevalences produced by the model fits to different regional sentinel survey data are shown below:



Other HIV/AIDS related assumptions used in model calibration

Several other important assumptions related to HIV/AIDS parameters were used in calibration of the model.

a) *Survival time after infection with HIV.* Most people have a long incubation period of between 3-12 years before they develop AIDS. The median time from infection to onset of AIDS is assumed to be approximately 8.5 years, with median survival with AIDS of 1 year.⁹⁶ The Model incorporates different survival times for infected people of different ages. Older adults and children have a quicker progression to AIDS than young adults. Around half of the children infected around the time of birth are expected to die within two years of birth, and most will die before they turn 5. However, a significant number can survive even into their teenage years before developing AIDS.

b) *Absence of any significant intervention to alter the course of the epidemic.* The basic projections assume that no interventions (e.g. vaccines; affordable ARV therapy) will be implemented on a large scale in Namibia. As most AIDS deaths in adults up to 2010 will be determined by current levels of HIV infection, vaccines or behaviour change would have limited impact on projected population sizes and death/AIDS rates.⁹⁷

Several medical interventions can reduce illness and slow the progress of HIV-infection to AIDS and death. Treatment with combinations of anti-retroviral drugs (ARV's) is the most effective intervention, but full ARV therapy remains costly and logistically difficult to implement on a nation-wide scale. Since medical insurance for teachers in Namibia is available, and this medical insurance covers the cost of antiretrovirals, we included an antiretroviral scenario for teachers. Other interventions may somewhat delay progression to AIDS and death. These include:

- Early treatment of any infections in HIV-positive people, particularly tuberculosis
- Preventive therapy against certain common infections, including TB
- Treatment by health care staff who are well trained and experienced in HIV care
- Maintaining healthier lifestyles, good nutrition, and avoiding re-infection with different viral strains may also be of value in many people.

No existing treatments offer a complete cure for HIV infection and it cannot be assumed that one will be found for many years, if ever, due to the complex nature of the virus.

c) *The rate of mother-to-child transmission of HIV is assumed to be 30%.* This may be considered to be optimistic, as transmission rates have been shown to be up to around 40% in breast or mixed-feeding women. However, this assumption is expected to have quite limited impact on projections of the population of working age, and even school-going age, before 2010.

d) *Fertility of HIV infected women is assumed to be around 30% lower than in uninfected women.* However, fertility impacts are assumed to differ for infected women in different age groups.⁹⁸ This assumption influences birth rates and the degree to which Antenatal Survey rates are likely to under or over-estimate community prevalence.

e) *Projections of point estimates indicate the situation on 1 January of each year.* As antenatal data is collected at other times, and the HIV/AIDS epidemic grows rapidly even within one year, this lag may lead to some discrepancy with projections from other sources.

⁹⁶ Survival time in Africa was previously thought to be much shorter than for developed countries. Recent evidence from Uganda and South Africa suggests that if data is adjusted for other, pre-existing risk of mortality, HIV/AIDS survival time is relatively close to that in developed country populations.

⁹⁷ A vaccine to prevent new HIV infections could significantly alter the course of the epidemic. However, there are many technical problems in vaccine development, including frequent changes in the characteristics of the virus and potential dangers of inadequately tested vaccines. Thus a vaccine should not be assumed to be available in Southern Africa for at least 5 years.

⁹⁸ Fertility adjustments are in line with age specific fertility in HIV infected women derived from a review of all available studies in Zaba B, Gregson S. *Measuring the impact of HIV on fertility in Africa*. AIDS 1998;12(suppl 1):S41-S50.

Sensitivity analyses for learner projections

In order to test some of the assumptions that we have in the model it useful to run some analyses that test these assumptions. We ran the following sensitivity analyses:

- *A scenario where a programme was introduced to reduce mother-to-child transmission of HIV.* We assumed that we could reduce about 30% of all HIV transmission to infants, starting from 2002. While we know that ARV drugs can reduce MTCT by 50%, it is extremely unlikely that this could happen immediately throughout the country. The start date of the intervention is 2002, the end date 2015.
- *Behaviour change scenarios involving greater condom usage, STD treatment, and reduction in numbers of partners.* These scenarios combined several changes in behaviour, beginning in 2002 and ending in 2015 to illustrate the effects on HIV/AIDS and demographic parameters. 30% condom usage is where all of those at risk start using condoms in 3 out of 10 sexual contacts. 30% STD treatment is where 30% of those with STD's are no longer deemed to be at the heightened level of risk associated with the presence of STD's (i.e. risk of infection is reduced). 30% reduced partners means that we keep the number of sexual contacts the same, but reduce the risk by reducing the range of partners by 30%.
- *Lower impact on fertility among HIV infected women.* This assumes that the overall reduction in fertility among infected women is less than the baseline assumption of around 30%.

While the above analyses do result in differences in the projected number of potential learners, these are relatively small and the overall trends to be considered by planners remain largely unchanged for the foreseeable future.

Issues in interpretation of learner projections

In interpreting projections the following issues should be considered, in addition to the assumptions noted in previous sections and main text. The results shown in this report are *projections* based only on demographic trends and not *forecasts* that would allow for a wider range of variables (eg changes in behaviour by subgroups; new fertility trends) to influence the size and risk profile of various population groups.

When considering the size of the learner population it is important to consider a number of issues:

- *The number of learners is very sensitive to changes in assumed underlying trends in fertility rates* of Namibian women, independent of HIV/AIDS. While HIV suppresses fertility as described above, there has been a general decline in fertility rates among women in Southern Africa. This has not always been well described, and previous trends may not continue; HIV/AIDS itself may lead to changes in choices around childbearing over time. It is also possible that fertility declines in HIV infected women may not be as marked as assumed. These uncertainties can lead to significant differences in projected numbers of children. Other factors such as important effects on child projections if there are even relatively small overestimates in infection and death rates among younger adults should also be borne in mind.
- *Indirect impacts of the epidemic could add to direct effects on enrollment* due to HIV/AIDS on the total number of children in the population. These include children dropping out of school to care for sick relatives, financial constraints on households etc.
- *The sensitivities of projections* to any individual HIV/AIDS parameters such mother-to-child transmission rates and fertility of HIV infected women are limited. However, unforeseeable changes in several parameters together could amount to more substantial deviation from projected numbers of children in the population.

- *It would seem appropriate to assume a higher number of children for planning purposes than a lower number. If plans are made using the lower range of numbers, and the number of children turns out to be higher, then shortages of teachers and infrastructure could result.*
- *If regional projections are considered in planning, it is important to note that regional differences in the basic demographic characteristics could not be considered due to data limitations. All regional modeling therefore uses national fertility and mortality parameters. In addition, migration, which may have a significant effect on various regional populations, has not been considered in projections.*

Projections of AIDS Impacts among Education Sector Staff

To project the potential levels of HIV infection among teachers in Namibia we downloaded their demographic profile from the Namibia EMIS data for 2002. The general demographics projections we have used for Namibia above were then used to predict HIV infection levels, AIDS illness and death among teachers. The assumption we used, therefore, is that teachers have the same risk of HIV infection as an equivalent person in the general population, of the same age and sex, and living in the same geographical area.

Teachers by gender and age group in 2002

<u>Age</u>	<u>Female</u>	<u>Male</u>	<u>Total</u>
< 25	185	131	316
25 – 29	1108	1017	2125
30 – 34	2069	1532	3601
35 – 39	3030	1580	4610
40 – 44	2068	1010	3078
45 – 49	1239	681	1920
50 – 54	677	537	1214
55 – 59	293	331	624
≥ 60	85	61	146
Total	10754	6880	17634

It is important to note that 36% of all teachers are women under 40 years of age, and this obviously places them at higher risk of HIV infection. In fact, 60% of all teachers in Namibia are under 40 years of age. This is consistent with teacher profiles from previous years, as shown in the table below.

Age group	Gender	1994	1995	1996	1997	1998	1999	2000	2001
Less than 25	Male	417	405	512	399	276	222	247	283
	Female	473	422	500	375	303	291	326	373
25-29	Male	1393	1356	1297	1268	1163	1146	1164	1250
	Female	2286	2114	1793	1654	1410	1285	1229	1334

30-34	Male	1543	1539	1651	1615	1687	1584	1632	1600
	Female	2810	2886	3056	2942	2836	2636	2473	2115
35-39	Male	971	1111	1133	1268	1361	1451	1439	1499
	Female	1838	2085	2170	2446	2643	2789	2805	2957
40-44	Male	737	732	785	776	828	860	937	969
	Female	1064	1094	1255	1383	1586	1767	1949	2046
45-49	Male	618	633	619	645	619	629	632	641
	Female	597	683	732	816	902	981	1064	1217
50-55	Male	354	404	434	506	573	611	621	591
	Female	341	352	408	444	519	595	696	752
More than 55	Male	142	147	164	170	177	191	215	245
	Female	143	164	170	187	202	203	216	245
Total	Male	6175	6327	6595	6647	6684	6694	6887	7078
	Female	9552	9800	10084	10247	10401	10547	10758	11039
Grand Total		15727	16127	16679	16894	17085	17241	17645	18117

Assumptions

Obviously all the assumptions that were used for the general demographic projections apply to the education sector staff projections. These include the same assumptions on survival from HIV to AIDS and death.

An important assumption that was made is that the demographic profile of education sector staff remains the same as present. In other words, women aged 30 – 34 years of age will make up the same proportion of the educator population in 2010 as they do now. However, as mortality rates among staff increase, it is possible that the trend could be towards a younger work force, as the number of new recruits increases. These people may be at higher HIV risk.

Scenarios

The base scenario that was produced assumes that educators have the same risk of infection and AIDS death as people in the general community of the same demographic characteristics, in the absence of antiretrovirals. This scenario was based on the national aggregated model as described for the general projections above.

In addition to this base projection, we used the same behaviour change scenarios as set out above.

On top of each of these scenarios, another scenario was introduced that an increasing number of teachers who developed AIDS would access ARVs, until 80 - 90% of those who had reached the AIDS stage of disease would be treated by 2002. ARVs were phased in from 1998, with increased coverage each year up to 2002. The projections assume that 80% of staff would ultimately have access to antiretrovirals. While this is an optimistic scenario, the ARV scenario serves to illustrate a “best case” scenario.

The impact of ARVs on mortality was calculated using data from the published medical literature. Mortality curves were derived from an article that appeared in the Journal of the American Medical

Association⁹⁹. While this represents a developed country experience of ARVs, it is the best data available, since there has been little long-term experience of using ARVs in developing countries.

Issues in the Interpretation of educator projections

As mentioned above, many of the important issues and limitations regarding these projections have been discussed in the sections where the projections were presented. However, there are a few issues that are worth highlighting or repeating:

Projections do not accommodate potential non-AIDS factors that change the number or demographic profile of people in various groups. Substitution and skills acquisition dynamics in the Education labour force and different sectors require further investigation.

- Education and training could create substantial potential for substitution to compensate for skills losses in the Education workforce. However, capacity for education and training itself may be reduced by HIV/AIDS impacts on educators. Many trainees are also likely to become infected unless they are enabled to protect themselves from HIV infection
- Trends in the general labour market that attract trained personnel away from the sector may influence the profile and number of personnel in ways that cannot be captured by current projections
- Emigration, immigration, employment equity and other factors could lead to changes in the size and demographic profile of skills groups

The HIV risk of teachers is not clearly understood. For these projections we have made a number of assumptions of educator risk. However, the real HIV prevalence rate among education sector employees remains unknown. An anonymous unlinked HIV seroprevalence study would be one way to answer the questions on this issue.

Because of poor understanding of HIV risk, teacher demand estimates are tentative. Assumptions about teacher demand in the future must acknowledge the uncertainties around the true rate of HIV infection among teachers.

Our understanding of the long term impacts of ARVs is limited. The current regimens of highly active antiretroviral therapy (HAART) have been in use for less than 5 years. The many side effects of these drugs are only now becoming apparent, as is the problem of compliance. This makes any modelling of HAART very exploratory at best, and these numbers should be used as illustrative.

Comparison to other data

The table below compares the model projections with the population projections produced by the Central Statistical Bureau, projections produced using the Spectrum model as well as with the most updated UNAIDS projections¹⁰⁰.

Comparing the current model output with the other projections for Namibia shows the following:

- Estimates of the total population vary quite widely. The Metropolitan model predicts quite a rapid decline in population growth, although in line with other models, it is not predicting population

⁹⁹ Lee LM, Karon JM et al. Survival After AIDS Diagnosis in Adolescents and Adults During the Treatment Era, United States, 1984-1997. JAMA. 2001;285:1308-1315

¹⁰⁰ Epidemiological Fact Sheets on HIV/AIDS and sexually transmitted infections: Namibia. 2000 Update (Revised). WHO and UNAIDS, Geneva, 2000.

decline. The more rapid fall in population growth with the Metropolitan model is probably a result of lower baseline fertility estimates.

- HIV prevalence rises early in the Spectrum model, but reaches a plateau early. The Metropolitan model predicts a slower increase in HIV prevalence, but with a later plateau.
- The Spectrum model assumes a rapid increase in the number people dying of AIDS. However, by the end of the decade the models predict a very similar numbers of annual AIDS deaths.
- The Spectrum model again shows a more rapid growth in the number of orphans, but with the Metropolitan model having very similar numbers by the end of the decade. The UNAIDS projections suggest a much higher number of orphans for 1999.

	Metropolitan/ Doyle	Central Statistical Bureau	Spectrum model	UNAIDS
Total Population				
2000	1,816,600	1,816,600		1,695,000
2005	1,966,066	2,043,200	2,050,000	
2010	2,052,119	2,245,200	2,220,000	
2014	2,093,694	2,404,600		
Adult HIV Prevalence				
2000	16.42%			19.54%
2001	17.85%		22.30%	
2006	22.68%		22.30%	
2010	23.40%		22.30%	
Deaths due to AIDS				
1999	6700			18000
2000	8337		15000	
2005	17400		24000	
2010	23650		24500	
Orphans				
2000	18200		20000	53000
2005	66600		90000	
2010	132500		150000	

Annex D: School Survey Methodology

The school survey component of the HIV/AIDS impact assessment on Education in Namibia was a cross-sectional analytic survey of schools in Namibia. It was designed to complement the other components of the impact assessment with empirical quantitative description of currently experienced and likely impacts of HIV/AIDS and response capacity in a nationally representative sample of schools.

The aim of the school survey was (1) to describe the strengths, weaknesses and areas of vulnerability of schools in functional areas in which HIV/AIDS is likely to impact, and (2) to describe the currently experienced level of impacts of HIV/AIDS.

Sampling

The school survey is primarily quantitative and conducted in a nationally representative stratified random sample of schools. The sampling frame was compiled from the most recently available EMIS database in Namibia. A stratified random sample of schools proportional to enrollment within each stratum was drawn to total 184 schools. Strata used were education region, level of school and urban/rural. Simple random sampling was used to select the specific schools in each strata i.e primary (rural/urban) and secondary (rural/urban).

A sub-sample of secondary and combined schools was selected using simple random sampling, for data collection from Grade 10 learners. Where a sampled school had more than one Grade 10 class, further random sampling was done to choose the specific class that would participate.

The final sample comprised 185 schools, and a further sub-sample of 1008 learners from Grade 10 classes at 27 secondary and combined schools.

Refusals or non-response were supplemented by a further school randomly sampled from the equivalent strata. For logistical reasons it was also necessary to replace several schools that were both very remote from the COE's, only accessible with 4X4 vehicles where these were unavailable and not close to other schools in the sample. These schools were substituted by the college co-ordinators who attempted to find replacement schools of similar socio-economic status, size and level to the remote school. Around 20 schools in the original sample had to be substituted in this way.

Measurement and data collection

The survey used three questionnaires to collect data from the research participants. One questionnaire was for school heads, the second one was for guidance and counseling or other teachers while the third one was for learners.

Questionnaires for heads and teachers were designed to be administered by trained interviewers, and questionnaires for learners were designed to be self-administered in a classroom situation. Draft questionnaires were pre-circulated to persons with knowledge of the education sector in Namibia and research in the Namibian context, and the instruments were modified according to their comments and suggestions. Qualitative information was obtained from the region visits and key informant

interviews, and the questionnaires used in the school survey were developed to minimise overlap with these and other sources of information to keep them an appropriate length.

Copies of the instruments are available from the authors on request.

Training of co-ordinators and interviewers

A co-ordinator was appointed from each of the four regional college of education (COEs), and each were responsible for recruiting around 8 interviewers from their COE, although this varied by number of schools to be visited in that region. Interviewers were drawn from COE staff as well as some school personnel, including teachers or heads.

The co-ordinator was responsible for supervising the interviewers and conducting a first level quality control. Interviewers and co-ordinators were trained in administration of the questionnaire and operational logistics in a one-day participatory training workshop. Training workshops were conducted at each of the COEs by a joint team comprising one member of the Abt staff paired with at least one Ministry or NIED official. The questionnaire was revised following the training to incorporate interviewer concerns and insights.

Copies of the training agenda and training manual that was distributed to the field workers are available from the authors on request.

Data collection logistics

Data collection took place concurrently in all of the regions over a 3 week period. Completed questionnaires were fast-mailed to Windhoek, collated and checked and sent on to Abt for data entry and cleaning.

Data were coded, and then entered in electronic form by professional data entry clerks.

Data analysis

Data were analysed using the SPSS statistical programme and STATA.

Key questions to be addressed in analysis and interpretation included:

1 How prepared are schools to respond to HIV in terms of prevention and mitigation responses, including:

- Policy and planning?
- Stigma and discrimination at school level?
- Basic knowledge of HIV prevention & wellness?
- Attitudes to adolescent sexual health education in schools?
- Help and support received by orphans - types and extent and gaps?
- Help and support received by staff?
- Management of e.g. absenteeism, attrition and other factors potentially affected by HIV/AIDS?

2. What are the already experienced and likely impacts of HIV/AIDS at school level on
- Teacher absenteeism
 - Employee attrition
 - Management and school functioning
 - Contact time and quality of education?
3. What are the already experienced and likely impacts of adult illness and death on pupils, including:
- Prevalence of orphanhood and vulnerable children?
 - Impacts of orphanhood; likely effects of adult illness and death on ability to meet basic needs, continued school attendance and performance.?
4. What types and scale of Ministry and other interventions are needed at school level, and what are the particular types of institutions or areas that are most in need of particular interventions?

Other issues:

- *Statistical power:* The survey was unlikely to have sufficient power to accurately estimate experienced certain impacts (e.g. teacher deaths). This is because the epidemic is at a relatively early stage in some regions, and the numbers impacted each year are likely to be small overall. Instruments were designed to capture several years of information where this is feasible to give some indication of cumulative impacts.
- *Gender sensitivity:* Where feasible all data were disaggregated by sex, to enable analysis of gender differences in vulnerabilities. Where possible respondents and interviewers included both men and women.

Annex E : Management information requirements

As indicated in previous sections, HIV/AIDS has potential to impact on the education system in a number of important ways. As far as the impact of HIV/AIDS on education management is concerned, some of the important areas to consider include:

- Declining enrollment
- Increasing drop-out/drop-in rates
- Decreasing retention and transition
- Increasing number of orphans
- Teacher absenteeism, attrition and relocation
- Loss of experience, quality and contact time
- Reduced school graduation and higher education entrance among strong students
- Decline in the overall quality of education provided and consequently in educational attainment
- Post graduate attrition and levels of skills in the workplace
- School revenue collection

It is important for the MBESC to be able to monitor all of the above, and in a way that allows for a rapid response if the need arises.

- Ideally, information and monitoring systems should generate a set of early warning signals that identify systems, regions, institutions and individual staff or learners threatened with severe dysfunction that require timeous intervention.
- Data and analyses disaggregated by gender, age and socio-economic status should be used where feasible to guide responses, and clarify key gender-related and other equity issues raised by HIV/AIDS.

Besides the important issue of *what* information to collect, there is also the issue of *how* to collect it, which may be done in a number of different ways. A framework is useful to classify the information by the method of data collection and the level at which it is analysed. This would include the following:

- *Routinely collected data analysed at a national or regional level level*, including the Annual Return and other national surveys. Instruments used for these surveys should be scrutinised to ensure that they capture HIV/AIDS-appropriate information. This is discussed in the tables below. As illustrated in Annex G, there are important limitations on this level of analysis in being able to identify impacts with certainty.
- *Routinely collected information analysed at other levels*. There is increasing recognition that data collected at school level which is analysed and used at a school, cluster or region level is crucial to develop timely and appropriate responses to the AIDS epidemic.
- *Analyses of secondary data*. In some cases other organisations may have collected information that is of relevance to the MBESC. Examples of this are illness and deaths collected by medical insurers and pension fund managers. The MBESC may want to keep track of these sources, to complement its own information
- *The use of sentinel sites*, where more intensive research is done. This is likely to be particularly important to assess new intervention e.g. orphan support mechanisms.
- *Research targeted at answering specific questions*. This could include KAP surveys and targeted HIV sero-prevalence surveys.
- *Qualitative research or monitoring*. This is likely to be critical to understand AIDS impacts that may not be adequately uncovered by quantitative analyses. This may be incorporated into routine management through development of instruments that, for example, enable school inspectors to elicit qualitative information from staff and students.

- *Adverse events monitoring.* Systems for managers or other stakeholders to report adverse events (e.g. effect of teacher absence on learning) may help to identify priority issues for responses.

Some considerations in tracking HIV/AIDS impacts and education sector responses are presented in Table E1 and Table E2. The tables illustrate the potential of routinely collected indicators to monitor AIDS impacts among learners and personnel respectively, and point to areas where special surveys or alternate strategies to collect data may be needed. This is a relatively comprehensive list of data needs, and will need to be prioritised in consultation with various stakeholders.

Table E1: Potential Indicators for Tracking Impacts on Learners and Monitoring Responses

Indicator	Priority	Comment
IMPACT INDICATORS		
Enrollment	+++	<ul style="list-style-type: none"> > Numbers of children enrolled are collected in the MBESC Annual Return. > Population surveys specifically asking about school enrollment are recommended to give more specific indications of enrollment and, in particular, to capture and understand circumstances of out-of-school youth. Repeat inter-censal surveys are likely to be important to track changes over the next decade. > Establishment of sentinel sites and repeat surveys including questions on enrollment, attendance and progress through the school system may be warranted to allow tracking of enrollment over time. > Identification of schools where lower learner numbers stem from social and economic HIV/AIDS impacts on households poses a particular challenge to the Ministry. School enrollment data from the Annual Returns should be interpreted together with Drop out and Transfer data. Consideration should be given to gathering qualitative data from schools on perceived reasons for changes in enrollment.
Drop outs and re-entrants	+++	<ul style="list-style-type: none"> > Overall numbers by grade and sex are collected in MBESC Annual Return. Overall data may hide growing disparities at school or circuit level. > Difficulties accessing existing up to date information. > The category, "other" limits usefulness of data, particularly at school, circuit and region management level. > Available data indicate growing gender disparities in drop out rates, which require further tracking and system responses. > It may be appropriate to expand data collected on drop outs and re-entrants in the Annual Return, as this is likely to become a more important indicator of sector performance and challenges. Consider e.g. requesting a register by name and description, as is required for learners with special education needs. > Monitoring drop outs and out of school youth through sentinel sites and repeat surveys will be important to assess educational needs of these children, as needs may be more appropriately met outside the formal school system e.g. for overage learners. > Incentive schemes to reward schools which assist drop outs to re-enter the formal system or other forms of education may be appropriate to encourage school management to monitor and support drop outs.
Transfers	++	<ul style="list-style-type: none"> > Data on transfers available from Annual returns but uncertain whether this captures all relevant movement between schools. > Consider comparisons of transfers in and out to monitor success of referral systems between schools.
Repetitions	++	<ul style="list-style-type: none"> > Data on repetitions available from Annual returns. May indicate important HIV/AIDS or other impacts on student performance.
Transition rates	+++	<ul style="list-style-type: none"> > Available from Annual returns. > Drop-out at key transition stages e.g. Grade 7-8 or 10-11, may be important manifestation of HIV/AIDS impacts. As higher level transition is often strongly influenced by supply of places rather than demand, consider tracking cohorts of learners to check whether the best quality

		candidates are progressing or liable to drop out due to socio-economic and HIV/AIDS factors.
Learner absenteeism	++	<ul style="list-style-type: none"> > Not in Annual Returns, though thought to be a strong influence on learner performance. > Recorded at school level, but quality and availability of data to track trends is uncertain. > Probably mainly feasible as part of action linked DMIS or school-level action-related management information systems. > Usefulness of prolonged or frequent absenteeism as early warning signal of impending drop outs should be explored - with linkages to intervention
Learners with special needs, potentially including OVC	+++	<ul style="list-style-type: none"> > Orphan registers with details of individual OVC are probably only feasible and useful at school level, but reporting of overall numbers of OVC (categorized by particular types of vulnerability) in Annual Return is probably desirable. > Develop robust indicators for early identification of vulnerable children for routine use at local level > Coordinate with registries of OVC compiled by social workers and some schools in design of instruments to assess care and support needs and trends. Consider issues such as confidentiality and sensitivities of children and parents/ guardians in system development. > Consider closer tracking of education outcomes of traditional special needs children who may be more vulnerable to HIV/AIDS impacts.
Other indicators of education quality e.g. examination results, school performance indicators	+++	<ul style="list-style-type: none"> > Pass rates routinely collected, and important independent of HIV/AIDS > Monitor trends at individual school or cluster level which may be hidden in aggregated statistics > Consider studies to identify any correlations between performance and indications of teacher illness or orphan rates in preceding years. > Qualitative information on school performance among orphans may be important.
Indicators of quality of school environment - Counselling rooms - School safety		<ul style="list-style-type: none"> > Counselling rooms not identified in current EMIS > Appropriate school safety indicators not clear. May include infrastructure e.g. lighting and incident reporting
Age range in classes		<ul style="list-style-type: none"> > Available from existing EMIS > Increases in late enrollments, temporary drop out and failure rates may significantly increase the range of student ages in classes. This may have implications for teaching process and approaches, as well as for high-risk sexual activity among students.
RESPONSE MONITORING INDICATORS (input, process and outcome)		
<i>Input</i>		
No. teachers trained to implement HIV/AIDS interventions	+++	<ul style="list-style-type: none"> > Consider incorporating in Annual Return
No. of peer educators in schools	++	<ul style="list-style-type: none"> > Consider incorporating in Annual Return
Barriers to access eg school levies, non-payment rates		<ul style="list-style-type: none"> > Consider in Annual Return
<i>Process</i>		
Implementation of HIV/AIDS curricula	+++	<ul style="list-style-type: none"> > Qualitative validation of effectiveness of implementation is important through school inspector or other assessment. Must include learner input into assessment.
No. schools with HIV/AIDS policies and plans	+++	<ul style="list-style-type: none"> > Consider itemizing key components of HIV/AIDS response in survey forms (e.g. OVC systems, staff prevention, workplace programme access etc in line with prevailing strategy.

Condoms distributed in schools	++	<ul style="list-style-type: none"> > Depends on MBESC condom policy change. Potentially important to assess overall effectiveness of programmes and efficient management of condom distribution. > Not currently routinely collected. Could be asked in the Annual Return.
<i>Outcome</i>		
Risk behaviour of learners	++	<ul style="list-style-type: none"> > Pregnancy data available from EMIS > Need to reduce “unknown” reasons for dropout > Review other sources of data eg DHS, KAPB studies and include in reports
Teacher sexual misconduct		<ul style="list-style-type: none"> > Monitor number of cases and outcomes centrally
Rates of new HIV infection among learners	+	<ul style="list-style-type: none"> > Tracking the rate of new infections across the whole system is unlikely to be a priority. However, consider serial HIV prevalence surveys or behavioural surveys in sentinel junior and senior secondary schools to assess patterns of new infections, susceptibility and vulnerability among learners, effectiveness of prevention and as a way to mobilise behaviour change.
Drop out, enrollment and repetition rates among needy children	+++	<ul style="list-style-type: none"> > Liaise with orphan surveys and studies utilizing OVC registers. Repetition rates captured in Annual Returns

Table E2. Potential Indicators to Track Impacts on Teachers and Monitor Responses

Indicator	Priority	Comments
IMPACT INDICATORS		
Rates of HIV infection amongst educators	+++	<ul style="list-style-type: none"> > Strongly consider anonymous HIV sero-prevalence surveys to validate the findings from projections, and mobilise support for responses. > System-wide HIV testing is unlikely to be a priority.
Educator and support staff attrition due to ill health, death and other causes	+++	<ul style="list-style-type: none"> > Information on MBESC teacher mortality can be extracted from the teacher data base. > Review reliability and efficiency of ongoing use of the above system. > Consider disaggregated analysis at school or cluster level to assess severity of impacts which may be hidden in aggregated statistics. > Reinforce systems (e.g. consider exit interviews) to establish reasons for attrition. Reasons for attrition that may be indirectly related to HIV/AIDS, such as skills shortages elsewhere in the labour market or stress, may become at least as important as death or illness as reasons for attrition. > Consider ways (e.g. DMIS or other local action oriented systems) to allow for effective use of ill health and mortality data to manage impacts timeously at local level.
Educator absenteeism	++	<ul style="list-style-type: none"> > Important information but reliable data not available. It is inherently difficult to enforce good routine reporting without appropriate incentives. > Sentinel sites or DMIS may provide more reliable information to inform planning. Consider monitoring absenteeism in urban centres to which staff may migrate to be closer to health care facilities. > Useful to disaggregate by cause to inform policy development e.g. around funeral attendance
Time taken to fill posts of teachers and managers	+	<ul style="list-style-type: none"> > Time taken to fill vacant posts is not routinely tracked. > May be key information to inform planning to reduce disruption due to attrition and transfer, and design of relief teacher systems.
Educator work performance	+	<ul style="list-style-type: none"> > Consider studies to assess differences in subject or overall school outcomes and possible correlations with teacher illness.

		> Qualitative information likely to be important to understand impacts.
Educator workload	+	> Monitor especially in relation to specialist subjects.
Intake and output of teacher training	+++	> Consolidation and routine tracking of intake and outputs of teacher training is urgently required. > Analysis of trends in specific skills areas likely to be critical > Monitor attrition during training and after graduation.
No. of teachers transferred on health and other grounds	++	> Monitor number and geographical distribution of health and other transfers > Monitor impact on availability of scarce skills and equity of teacher distribution.
RESPONSE MONITORING INDICATORS		
<i>Inputs</i>		
No. teachers reached by HIV prevention programmes	+++	> Not currently routinely collected. Could potentially be asked in the Annual Return.
No. of schools in possession of HIV/AIDS Code of Conduct/ policy	+	> Not currently routinely collected. Could potentially be asked in the Annual Return. > Qualitative data on effective use of policy likely to be important.
Availability and use of relief staff and other cover	++	> Not routinely tracked. Important to assess level or disruption of teaching, quality of relief teachers and costs of cover systems.
<i>Process</i>		
Ill health retirement and death benefit processes	++	> Monitor appropriateness and efficiency of utilisation of retirement, death and disability benefits processes.
ARV availability and outcomes	+++	> Request routine reporting of statistics on numbers of education staff on ARVs, treatment failure rates and other aspects of HIV/AIDS care from PSMAS. > Monitor trends in medical aid coverage and costs
No. of teachers utilising wellness programmes and counselling services	++	> Not currently routinely collected. Need information on the impacts of ARVs on absenteeism and mortality.
<i>Outcomes</i>		
Risk behaviour amongst staff	++	> Review data available from national surveys > Consider sentinel surveys, KAP studies and qualitative data collection to inform HIV prevention and response planning
New HIV infections among staff	+	> Tracking the rate of new infections across the whole system is unlikely to be a priority. However serial sentinel HIV prevalence surveys in select schools should be considered to assess patterns of new infections and vulnerability among teachers, effectiveness of prevention and to mobilise behaviour change.
Adverse impacts on learning	+	> Consider monitoring of ill health retirement vs. death rates, as well as adverse events monitoring (e.g. complaints of inadequate teaching due to illness).

The availability of information or data is certainly critical to informed decision-making, but the key is being responsive to the data 'alerts'. In order to implement this data 'wish list', the Ministry should prioritise initiatives and resources, with particular attention to management issues.

For example, the Ministry should consider the following:

- *Current constraints* to effective EMIS (e.g. human and financial resource capacity); which hamper the link between data collection and policy and planning.
- *Improving processing capacity* at Ministry and region level to capture and analyse the data as well as increase access to data in order for the Ministry to respond effectively and efficiently to issues raised.
- *Institutionalising EMIS and DMIS* into mainstream operations of the Ministry.

What to do with the information collected should also be a consideration in the light of limited human and financial resources. The Ministry should consider exploiting synergies between activities such as monitoring and evaluation, lifeskills, out-of-school youth programmes, health and social workers for assistance in data collection and analysis to facilitate early identification of problems and rapid responses. Each role-player in the circle of support is in a position to provide data input and action based on the data efficiently.

In this way, responses to HIV/AIDS would not be exclusive or onerous, but will be relevant to other challenges facing education (for example poverty).

Annex F : Priority actions identified by senior education policy makers and managers

**Report back Workshop on the Impact of HIV/AIDS in the Education Sector in Namibia.
6th March, 2002**

1. Priority Actions to Enhance Support of Vulnerable Children

- Develop policy for principals to mandate teachers to conduct house visits
- Facilitate the creation of an environment of care in schools and in clusters
- Involve learners in decision making through learner representative councils
- Monitor Inspectors at all levels
- Use school Boards to sensitise learners, teachers and parents on moral values
- Encourage role modelling of desired behaviour
- Develop systems to identify vulnerable children
- Enforce a code of conduct for teachers
- Make it mandatory for teachers to know parents/guardians
- Enhance the provision of primary health care in schools
- Encourage sports officers to begin working with identified vulnerable children
- Establish circles of support at school and cluster level and consider using sports in prevention and mitigation initiatives

2. Priority Actions to Mitigate the Impact on Educators and the Education System

- Develop a workplace policy on HIV/AIDS
- Manage absenteeism and ill health
- Amend Public Service Act in regards to the appointment of teachers
- Review pre and in-service training
 - Make HIV/AIDS education compulsory in the foundation year of teacher training
 - Make life-skills and counselling more prominent in the curriculum
 - Promote specialised training in lifeskills for teachers
- Consider HIV Prevention and lifeskills training for teachers
- Identify vulnerable workplace processes
- Review medical aid cover to accommodate for the impacts of HIV/AIDS and provide more information on benefits i.e. antiretrovirals

3. Priority Actions to enhance Prevention Initiatives

- Enhance “values and morals” education across the curriculum
- Promote a more balanced approach to prevention in the media where ‘abstinence’ is given more prominence as an alternative option.
- Strengthen curriculum content
- Mainstream HIV/AIDS into the timetable and make it examinable
- Ensure that the institutional environment is safe and supportive
- Co-operate better with parents

4. Priority actions for enhanced responses in Higher Education

- Integrate STD, HIV/AIDS, sexual, and reproductive issues into curriculum for higher education

- Develop a policy on HIV/AIDS for higher education
- Encourage peer education in institutions of higher learning
- Increase IEC on HIV/AIDS
- Create free condom corners
- Ensure the provision of medical services for STD treatment
- Encourage staff members and students to break the silence on HIV/AIDS
- Campaign to reduce the stigma of HIV/AIDS
- Conduct research on behavioural change and drugs

5. ‘Zero Budget’ Activities allowing for effective action with limited extra resource requirements

- Use Volunteers to spearhead prevention and sensitisation campaigns amongst students, staff, and community members.
- Disseminate information about HIV/AIDS through culture clubs
- Enhance awareness through the print and electronic media
- Revive HIV/AIDS Clubs at colleges
- Utilise learners to disseminate information to parents
- Create more time to listen and be more empathetic to staff members
- Distribute HIV/AIDS material where not available (i.e. retrieval from store rooms etc)
- Strengthen existing support to prevention and care and support initiatives. Send prevention and care and support messages to colleagues electronically

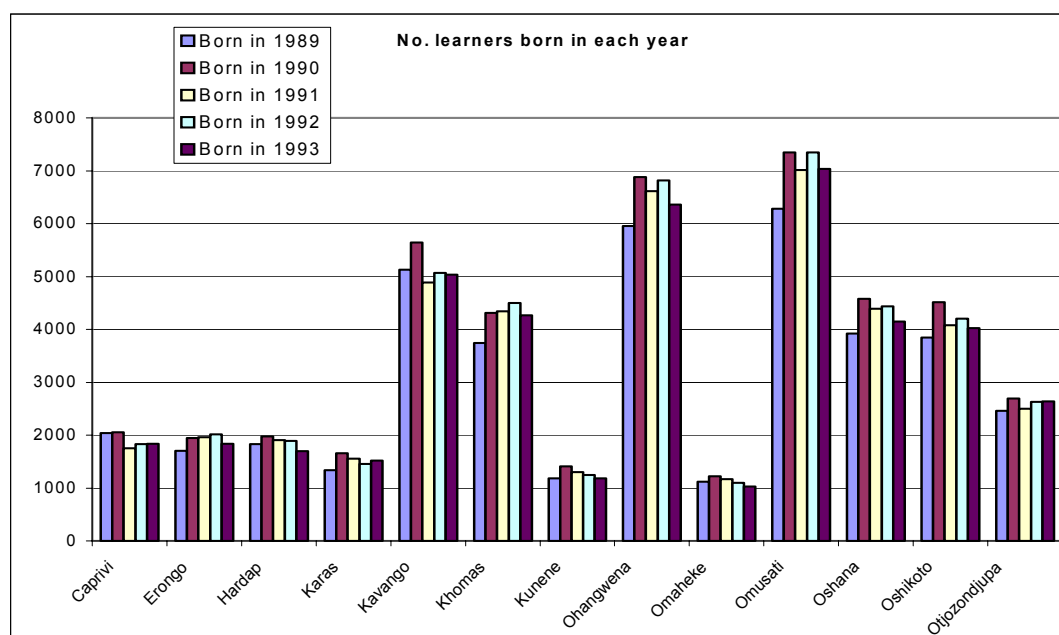
Annex G : Analysis of trends in enrollment, drop out and educator attrition

Data for the 1990s was analysed to assess trends in enrolment, drop out rates and teacher attrition to identify possible impacts of HIV/AIDS or predisposing factors to vulnerability.

1. Age cohort analysis to assess trends in primary school enrollment

Data was derived recent annual education censuses which record the total number of learners of different ages. The data for each census was then used to assess the number of learners born in different years. The average enrolments of these cohorts in different censuses was then established, for example by averaging the number of 9 year-olds in 1999, with the number of 10 year-olds in 2000 and 11 year-olds at school in 2001. These averages were calculated in order to smooth out year-to-year variations and thus to get a more reliable estimate of the size of each cohort.

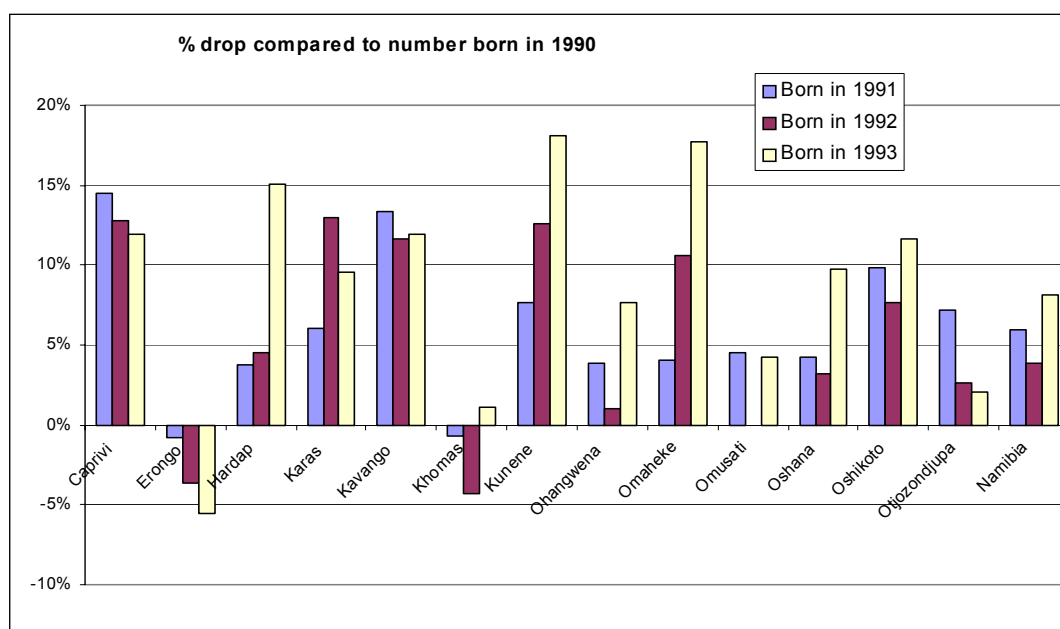
Graph G1 and G2 explore changes in numbers of learners born in different years. Graph G1 shows the estimates for the total number of learners born in each year between 1989 and 1993. Most regions show a decline in the number of learners in each age cohort. The drop is most marked for learners born after 1990.



Graph G1: Estimated number of learners born 1989-1993 by region

Graph G2 shows the percentage drop in the size of year-to-year cohorts compared to the 1990 cohort. For the country as a whole, the drop amounts to 5-8%. It should be stressed that these are numbers of children at school and not numbers of children in the population as a whole.

How can the decline be interpreted? First, we may be seeing a drop in demand for schooling so that fewer children in more recent years are being sent to school. Second, some of the drop could be due to AIDS impacts on the number of children. Of note, the drop occurred earlier in Caprivi than in other regions (HIV infection rates rose to high levels in Caprivi some years before other regions and prevalence among pregnant woman was already 14% by 1992). Third, the decline might be associated with declining basic fertility and/or the possibility that fertility rates were abnormally high in 1990.



Graph G2: Percentage reduction in estimated numbers of children born compared to 1990

Overall, it this analysis cannot be considered conclusive. However, it illustrates an analytical approach that may be useful to track trends in future. However, results it may be consistent with effects of HIV/AIDS either on the number of children in communities in the Caprivi or effects of household HIV/AIDS impacts that reduce enrolment by young children.

2. Trends and profiles of drop-outs

Trends in drop-out rates

Analysis of EMIS data suggests the national profile of drop-outs for girls and boys given in Table G1.

Table G 1: Drop out rates by age and sex - Namibia

	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Grade 1	9%	10%	5%	5%	7%	7%	7%	7%	2%	4%	4%	4%	4%	5%	3%	3%	3%	3%
Grade 2	4%	6%	2%	2%	2%	4%	2%	4%	2%	3%	0%	0%	2%	3%	0%	1%	0%	1%
Grade 3	2%	4%	1%	2%	1%	3%	3%	4%	1%	3%	2%	4%	1%	3%	1%	0%	1%	1%
Grade 4	5%	6%	3%	3%	6%	8%	5%	6%	4%	6%	4%	6%	4%	7%	2%	2%	0%	1%
Grade 5	7%	7%	4%	4%	6%	7%	6%	7%	4%	6%	5%	7%	6%	8%	4%	5%	4%	7%
Grade 6	6%	5%	3%	3%	7%	7%	7%	8%	6%	7%	6%	6%	7%	7%	4%	6%	5%	5%
Grade 7	10%	8%	7%	7%	9%	8%	9%	9%	8%	9%	8%	9%	9%	11%	6%	8%	7%	8%
Grade 8	12%	10%	8%	8%	10%	10%	9%	9%	9%	10%	10%	9%	12%	12%	10%	10%	10%	10%
Grade 9	11%	8%	4%	5%	9%	8%	7%	8%	8%	8%	9%	8%	12%	11%	11%	9%	11%	10%
Grade 10*	22%	20%	21%	17%	24%	21%	32%	29%	32%	26%	50%	41%	45%	41%	43%	41%	38%	39%
Grade 11	9%	6%	4%	1%	6%	3%	6%	5%	6%	5%	6%	4%	5%	5%	4%	3%	3%	3%

Table G 2: Drop out rates by age and sex – Caprivi

	1992		1993		1994		1995		1996		1997		1998		1999		2000	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Grade 1	12%	7%	4%	4%	9%	5%	5%	6%	2%	2%	10%	6%	5%	8%	6%	4%	7%	4%
Grade 2	-3%	6%	0%	-1%	0%	-1%	2%	5%	-3%	-4%	5%	6%	4%	5%	3%	2%	-1%	-2%
Grade 3	3%	-2%	0%	-1%	-3%	-4%	5%	1%	-4%	-1%	5%	6%	4%	4%	4%	3%	1%	1%
Grade 4	-1%	4%	1%	3%	4%	3%	5%	3%	-1%	-2%	6%	3%	3%	5%	4%	1%	2%	2%
Grade 5	2%	6%	4%	1%	4%	3%	4%	7%	-1%	3%	7%	6%	8%	8%	5%	2%	2%	3%
Grade 6	5%	1%	4%	2%	3%	-2%	3%	5%	0%	3%	10%	8%	6%	8%	6%	8%	5%	4%
Grade 7	5%	4%	3%	0%	7%	8%	6%	5%	5%	4%	7%	5%	12%	8%	3%	3%	4%	3%
Grade 8	8%	2%	5%	-1%	11%	6%	6%	5%	9%	5%	11%	6%	9%	11%	10%	7%	8%	1%
Grade 9	3%	1%	-7%	1%	6%	6%	9%	7%	11%	7%	9%	6%	13%	14%	6%	4%	11%	2%
Grade 10	20%	5%	7%	7%	14%	16%	35%	37%	15%	9%	25%	18%	34%	32%	37%	35%	23%	25%
Grade 11	4%	1%	-2%	-1%	10%	3%	6%	4%	8%	4%	8%	3%	14%	9%	4%	4%	3%	3%

For secondary school drop out, there has been a rising overall trend in rates at national level for the 1990s, largely due to drop out in Grade 10, which surged after new policy prevented repetition of Grade 10 after 1997.¹⁰¹ However, this appears to have stabilised. In Caprivi, where overall trends have been similar to those at national level, there are suggestions of a more rapid decline in drop out rates than nationally in the late 1990s.

In primary schools both nationwide and in Caprivi, even in grades where there has been a linear trend increase in dropout rates since 1995, there tends to have been a decline since 1998.

Nationally in the year 2000, across grades, more boys dropped out of school in 2000, except in Grade 9 where female drop out was 11 percent compared to boys at 10%. However, for most of the 1990s, there has been a more marked drop out rate among secondary school girls than boys, particularly in Grade 10 and 11. In addition, there is regional variation, as illustrated by Caprivi in 2000, where more girls dropped out in 2000 across grades (3 % more in Grade 1, 7% more in Grade 7 and 9% more in Grade 9).

For the Primary School grades, generally, more boys have dropped out between 1992 and 1998. During 1999 and 2000 for Grade 1, figures were equal nationally. In Caprivi, drop out

¹⁰¹ The observations noted here remain valid even when Grade 10 drop outs are excluded from analyses. Other policy changes which make it more difficult to interpret data include automatic promotion policies in Grades 1-3 and automatic exclusion after failure of grade 12 since 1994.

for girls have generally slightly exceeded those for boys but no clear trends emerge over the second part of the 1990s.

Analyses of causes of drop out

Early in 1996, a survey was done in all schools to establish how many learners had left school between the beginning of 1995 and 1996, and the reasons for dropping out. A total of 29,436 learners were reported as having left school during that year. The proportion of drop outs due to each cause are shown in Graphs G3 and G4.

Several feature of the results are noteworthy.

- A large proportion of learners leave school for reasons that directly or indirectly relate to parental support, including needing to support economic activities at home. This is a concern due to expected increases in rates of orphanhood.
- Few drop-outs are due to an inability to pay fees, although inability to pay fees may be a contributing factor in several other categories of reasons for drop out.
- Several categories of reasons (including unknowns, discipline, and stayed home) may include significant numbers of children facing stresses that are typically associated with orphanhood and similar vulnerabilities.¹⁰²
- The data provides little information on the fate of children who leave schools due to movement of parents or other disruptions in households that lead to migration.
- Reasons for drop out vary across age groups. This suggests that if AIDS orphanhood increases levels of certain vulnerabilities, this may lead to increased drop outs primarily in certain age and grade groups, with others not being very heavily affected. For example, dropping out to look for a job increases among learners in higher grades, although staying at home to work appears to be more prevalent for earlier grades.

¹⁰² Regional visits indicated that teachers and schools are often not well informed about drop outs and reasons for drop out.

Table G3: Causes of drop out by region 1996

	Caprivi	Erongo	Hardap	Karas	Kavango	Khomas	Khorixas	Ohangwe na	Omaheke	Omusati	Oshana	Oshikoto	Otjozondj upa	Grand Total
Parents moved	29.6%	28.3%	22.3%	35.5%	21.5%	29.8%	44.2%	6.1%	21.8%	6.4%	7.9%	7.8%	14.2%	16.4%
Too far to walk	0.9%	0.2%	0.2%	0.7%	3.0%	1.1%	1.0%	1.5%	0.5%	1.4%	1.6%	2.1%	1.3%	1.6%
Stayed home	11.9%	5.3%	11.1%	7.6%	12.6%	3.9%	5.4%	15.6%	7.9%	19.1%	11.5%	11.4%	9.5%	12.1%
Left to work	1.3%	1.8%	4.3%	1.4%	1.5%	2.7%	0.8%	4.5%	1.6%	5.6%	3.5%	8.0%	2.1%	3.6%
Work at home	0.2%	0.5%	1.1%	0.8%	2.5%	0.6%	0.7%	6.8%	1.5%	1.3%	0.9%	2.6%	1.3%	2.5%
Hunger	0.6%	0.0%	0.0%	0.0%	9.2%	0.4%	0.0%	0.6%	0.1%	0.1%	0.8%	0.8%	0.3%	2.1%
Clothing	0.0%	0.0%	0.0%	0.6%	1.5%	0.1%	0.5%	0.5%	0.2%	0.4%	0.6%	0.4%	0.2%	0.6%
No parental support	0.9%	1.6%	1.8%	2.6%	2.7%	2.1%	0.4%	1.2%	0.7%	1.0%	1.2%	1.5%	2.2%	1.7%
School fees	0.2%	1.2%	0.0%	0.5%	0.5%	1.2%	0.0%	0.2%	0.7%	0.2%	0.4%	0.2%	0.4%	0.4%
Hostel fees	0.0%	0.7%	3.8%	0.9%	0.8%	0.8%	0.9%	0.4%	0.5%	0.0%	0.0%	0.0%	0.4%	0.6%
Exam fees	1.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%
Pregnant	9.8%	6.7%	4.1%	4.0%	7.1%	5.6%	2.4%	17.5%	6.1%	21.1%	21.0%	20.1%	3.7%	12.4%
Discipline	1.9%	6.8%	2.7%	6.7%	1.5%	4.6%	1.9%	1.3%	8.4%	4.2%	2.4%	2.3%	4.5%	3.0%
Dead	1.1%	0.4%	0.6%	0.5%	1.0%	1.5%	0.8%	1.2%	0.8%	1.3%	1.2%	0.8%	1.1%	1.0%
Illness	1.5%	1.6%	1.4%	1.6%	5.3%	2.5%	1.5%	4.0%	4.2%	4.4%	3.5%	2.8%	2.7%	3.6%
Unknown	3.6%	21.5%	29.7%	21.1%	16.1%	24.2%	23.1%	29.5%	21.1%	26.9%	24.2%	24.3%	40.3%	24.3%
Failure + age issues	34.9%	11.4%	13.1%	11.0%	10.8%	9.8%	4.5%	7.2%	19.4%	5.1%	17.6%	10.8%	15.1%	10.6%
Other	0.6%	11.9%	3.9%	4.7%	2.0%	9.1%	11.8%	1.8%	4.5%	1.1%	1.6%	4.1%	0.5%	3.5%
N =	470	1228	1328	1028	5643	2178	1038	5302	921	3915	2014	2936	1435	29436

Table G4: Causes of drop out by grade 1996 (n=29,436)

						Grade							
	1	2	3	4	5	6	7	8	9	10	11	12	Total
Parents moved	25.3%	26.4%	22.0%	18.8%	17.6%	12.0%	6.7%	9.1%	17.2%	4.3%	5.9%	1.7%	16.4%
Too far to walk	3.5%	2.5%	1.9%	3.0%	1.1%	1.1%	0.5%	0.3%	0.3%	0.2%	0.2%	0.0%	1.6%
Stayed home	16.2%	15.4%	15.8%	16.2%	16.7%	13.9%	11.2%	7.0%	5.4%	2.3%	1.5%	0.9%	12.1%
Left to work	0.1%	1.1%	2.0%	4.2%	6.4%	6.5%	5.3%	4.3%	4.1%	2.9%	6.8%	20.5%	3.6%
Work at home	4.6%	5.4%	4.8%	3.1%	1.2%	1.0%	1.2%	0.3%	0.3%	0.6%	0.5%	0.0%	2.5%
Hunger	5.9%	3.5%	2.9%	2.0%	1.5%	1.4%	0.6%	0.2%	0.3%	0.0%	0.0%	0.0%	2.1%
Clothing	1.0%	0.7%	1.2%	0.8%	0.6%	0.3%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.6%
No parental support	2.7%	2.2%	2.4%	2.1%	1.2%	1.7%	1.1%	1.3%	0.6%	0.3%	1.5%	1.7%	1.7%
School fees	0.3%	0.9%	0.8%	0.6%	0.2%	0.3%	0.1%	0.2%	0.4%	0.3%	0.0%	0.2%	0.4%
Hostel fees	0.1%	0.6%	0.5%	0.4%	1.4%	0.6%	0.7%	0.8%	0.7%	0.4%	0.7%	0.5%	0.6%
Exam fees	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.5%	0.1%
Pregnant	0.0%	0.5%	2.0%	5.9%	14.1%	20.7%	24.8%	25.1%	25.1%	16.5%	33.2%	32.1%	12.4%
Discipline	0.3%	1.2%	1.1%	1.9%	2.9%	5.0%	4.8%	6.0%	5.7%	2.9%	13.7%	5.0%	3.0%
Dead	1.5%	1.5%	1.2%	0.7%	0.9%	1.3%	0.7%	0.5%	0.6%	0.8%	1.8%	2.1%	1.0%
Illness	4.1%	5.1%	4.2%	5.1%	4.0%	3.2%	2.7%	2.5%	2.4%	1.6%	1.8%	2.6%	3.6%
Unknown	28.1%	28.6%	29.9%	27.2%	24.5%	25.2%	21.0%	27.1%	20.8%	10.0%	21.8%	8.0%	24.3%
Failure or age issues	4.5%	2.3%	4.4%	5.6%	4.2%	2.8%	5.5%	11.3%	13.4%	54.1%	4.2%	7.8%	10.6%
Other	1.6%	2.0%	2.9%	2.5%	1.5%	3.0%	12.6%	3.6%	2.7%	2.4%	6.4%	16.5%	3.5%

A further important finding is that around 25% of female drop outs, and up to 40% in some regions, are due to pregnancy (Table G5). This is potentially an indicator of risk of HIV infection, the status of women, and possibly potential for abuse of vulnerable female learners.

Table G 5: Percentage of drop outs due to pregnancy among girls

Region	Percent of drop-outs due to pregnancy amongst girls
Caprivi	17%
Erongo	13%
Hardap	8%
Karas	8%
Kavango	14%
Khomas	11%
Khorixas	5%
Ohangwena	34%
Omaheke	12%
Omusati	40%
Oshana	38%
Oshikoto	37%
Otjozondjupa	7%
Total	24%

3. Gender differences in enrollment

The previous section already illustrates some of the gender dimensions of educational enrolment and drop out. Table G6 is illustrative of general patterns of enrollment differentials by gender and age in Namibia. This and other data indicate that, overall, gender disparities in access to schooling favour females in primary school ages but that males are advantaged in participation in older ages and secondary education. However, Gross Enrollment Ratios do suggest that girls are more likely to be over-age in classes, suggesting some vulnerability. There is also some regional variation in participation rates by females and males. In Katima and Rundu, secondary enrollment by girls is noticeably lower. The opposite is true in Ondangwa East and West where enrollment of boys is lower.

While no trends could be identified that suggest effects of household impacts of HIV/AIDS on enrollment rates of boys and girls at any age thus far, patterns indicate that enrollment of girls in higher age groups and grades may well be particularly vulnerable to such impacts and should be monitored. In addition, enrollment of boys in primary school ages and in certain regions may be vulnerable to household pressures and also warrants monitoring.

Table G6. Ratio of estimated male/ female age specific enrollment rates by age – Namibia

Year \ Age	06	07	08	09	10	11	12	13	14	15
1992	94%	97%	97%	92%	98%	93%	94%	94%	93%	92%
1993	98%	97%	98%	95%	95%	94%	93%	95%	93%	93%
1994	96%	99%	95%	95%	94%	90%	96%	95%	95%	94%
1995	95%	96%	98%	94%	96%	95%	94%	94%	93%	94%
1996	92%	100%	97%	96%	93%	94%	95%	93%	94%	93%
1997	95%	96%	96%	96%	96%	94%	94%	93%	93%	94%
1998	90%	97%	96%	97%	96%	95%	93%	94%	94%	92%
1999	94%	93%	94%	96%	98%	95%	95%	91%	94%	93%
2000	94%	95%	94%	95%	95%	97%	94%	94%	93%	94%
2001	95%	97%	95%	93%	95%	95%	96%	96%	94%	92%

Year \ Age	16	17	18	19	20	21	22	23	24
1992	92%	97%	102%	106%	109%	116%	122%	116%	124%
1993	92%	94%	105%	110%	114%	113%	115%	119%	131%
1994	94%	99%	106%	115%	116%	120%	120%	119%	134%
1995	93%	100%	107%	112%	128%	127%	145%	145%	145%
1996	94%	99%	106%	118%	123%	135%	142%	146%	148%
1997	95%	100%	105%	115%	129%	137%	154%	169%	184%
1998	94%	99%	110%	121%	138%	154%	167%	187%	224%
1999	94%	99%	108%	126%	143%	167%	187%	194%	223%
2000	95%	98%	112%	126%	148%	164%	184%	209%	203%
2001	95%	101%	106%	125%	145%	163%	184%	190%	213%

Conclusions – drop out and enrollment

The analysis suggests several main conclusions:

1. There are no clear trends in overall drop out rates suggesting HIV/AIDS impacts in Caprivi at Primary or Secondary level, where these would be expected to be most marked due to the regions advanced epidemic. Similar trends occur at national level, and if HIV/AIDS is influencing drop out, this seems to be obscured by other influences.
2. Differential HIV/AIDS impacts on girls and boys drop out is similarly difficult to ascertain. In general, girls in Namibia are not subject to as gross disadvantages in terms of drop out and enrollment as in some other African countries, although their disadvantage at secondary level is more apparent. Nevertheless, data suggests that historically, and particularly in certain regions, girls do seem to be at risk of disadvantage. Thus their schooling may prove to be more vulnerable to household impacts of HIV/AIDS. A further concern is the apparent vulnerability of boys to drop out, particularly in primary school.
3. Many of the relatively prominent causes of drop out are due to factors that tend to be associated with AIDS orphanhood. However, it is apparent that these factors affect many other vulnerable Namibian children independent of HIV/AIDS.
4. Both data sets illustrate the difficulties of interpreting aggregated data to identify trends and the importance of various causes of drop out. Trends are difficult to discern or interpret. For this reason, and because of the desirability of acting to prevent or reverse increasing drop out, decentralised and active monitoring of drop out at school level seems highly desirable. Nevertheless, central monitoring of trends will clearly remain important.

3. Educator attrition and transfers

Analysis of recent educator attrition and transfer data from EMIS yielded the results shown in Table G7. With the limited time series of data available, it is difficult to discern any specific trends at national or regional level. Levels of attrition and transfers differ quite markedly between regions but, of note, levels in Katima Mulilo do not suggest any gross differences from other regions suggestive of HIV/AIDS impacts. In general attrition and transfer rates are at levels which suggest that projected rates illness and death related to HIV/AIDS, particularly under no-ARV scenarios, could add quite substantially to levels of attrition and transfer.

Table G7. Educator attrition and transfer rates

		1998	1999	2000
National	Attrition Rate	8.4%	7.2%	8.2%
	Transfer Rate	4.1%	5.5%	6.1%
Katima Mulilo	Attrition Rate	10.4%	6.6%	5.7%
	Transfer Rate	6.9%	14.1%	7.4%
Rundu	Attrition Rate	12.9%	9.6%	10.0%
	Transfer Rate	6.0%	8.8%	9.8%
Ondangwa East	Attrition Rate	8.9%	6.9%	9.2%
	Transfer Rate	3.4%	4.3%	5.7%
Ondangwa West	Attrition Rate	5.3%	7.0%	6.2%
	Transfer Rate	1.9%	4.0%	4.9%
Khorixas	Attrition Rate	9.7%	6.4%	8.5%
	Transfer Rate	5.1%	4.2%	4.7%
Windhoek	Attrition Rate	6.8%	6.7%	8.4%
	Transfer Rate	3.3%	4.1%	4.8%
Keetmanshoop	Attrition Rate	10.7%	7.7%	9.9%
	Transfer Rate	7.5%	5.8%	8.3%